

## NF VALIDATION

### Validation of alternative analytical methods

*Application in food microbiology*

## Summary report

Validation study according to the EN ISO 16140-2:2016

### **Listeria spp. Detection**

- > **BACGene Listeria Multiplex** - Test Kit for qualitative real-time PCR detection of *Listeria monocytogenes* and *Listeria spp.*  
(Certificate number: EGS 38/05 - 03/17)
- > **BACGene Listeria spp.** - Test Kit for qualitative real-time PCR detection of *Listeria spp.* (Certificate number: EGS 38/02 - 01/17)  
in a broad range of food and environmental samples

### Qualitative method

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This report consists of 220 pages, including 12 appendices.

Only copies including the totality of this report are authorised.

Competencies of the laboratory are certified by COFRAC accreditation for the analyses marked with the symbol♦.

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Quality Assurance documents related to this study can be consulted upon request from **Gold Standard Diagnostics Freiburg GmbH**.

The technical protocol and the result interpretation were realised according to the EN ISO 16140-2:2016 and the AFNOR technical rules (PR Revision 7).

<b>Validation protocols</b>	<ul style="list-style-type: none"> <li>▪ ISO 16140-1 (2016): Microbiology of the food chain - Method validation — <i>Part 1: Vocabulary</i></li> <li>▪ ISO 16140-2 (2016): Microbiology of the food chain - Method validation — <i>Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method</i></li> <li>▪ AFNOR Technical Rules (PR Revision 7)</li> </ul>
<b>Reference method<sup>♦</sup></b>	ISO 11290-1 (May 2017): Microbiology of the food chain - Horizontal method for the detection and enumeration of <i>Listeria monocytogenes</i> and of <i>Listeria spp.</i> - Part 1: detection method
<b>Alternative methods</b>	<ul style="list-style-type: none"> <li>▪ <b>BACGene Listeria Multiplex</b> - Test Kit for qualitative real-time PCR detection of <i>Listeria monocytogenes</i> and <i>Listeria spp.</i></li> <li>▪ <b>BACGene Listeria spp.</b> - Test Kit for qualitative real-time PCR detection of <i>Listeria spp.</i></li> </ul>
<b>Scope</b>	<ul style="list-style-type: none"> <li>&gt; <b>Broad range of food</b></li> <li>&gt; <b>Environmental samples (excluding primary production samples)</b></li> </ul>
<b>Certification organism</b>	AFNOR Certification ( <a href="http://nf-validation.afnor.org/">http://nf-validation.afnor.org/</a> )

<sup>♦</sup> Analyses performed according to the COFRAC accreditation

# 1 INTRODUCTION

The BACGene *Listeria spp.*- Test Kit for qualitative real-time PCR detection of *Listeria spp.* were validated for a broad range of foods and production environmental samples in January 2017 (certificate number: EGS 38/02 - 01/17) according to the EN ISO 16140-2:2016 and the AFNOR Certification Technical Rules (revision 6).

A summary of the different studies is given in the table below.

**Table 1 - Summary of the different studies**

Date	Study	Reference method	Validation standard
January 2017	Initial validation for: <ul style="list-style-type: none"> <li>• A broad range of foods</li> <li>• Production environmental samples</li> </ul>	ISO 11290-1 (2017)	ISO 16140-2 (2016)
January 2020	Extension study for the use of FastFinder software for interpretation of data generated by AriaMx from Agilent and CFX96 Touch™ Deep Well from Bio-Rad The data corresponding to this study are available from the Eurofins GeneScan Technologies GmbH.	/	/
December 2020	Renewal study	ISO 11290-1 (2017)	ISO 16140-2 (2016)
October 2023	Extension study for the use of a new enrichment broth: BACGro ULTRA <i>Listeria</i> Broth (BULB) for the BACGene <i>Listeria spp</i> kit Extension for Software PURE. The data corresponding to this study are available from NF VALIDATION	ISO 11290-1 (2017)	ISO 16140-2 (2016)

Two enrichment broths are available:

- **Actero™ *Listeria* Enrichment media for the BACGene *Listeria spp.* and the BACGene Multiplex kits**
- **BACGRO ULTRA *Listeria* broth for the BACGene *Listeria spp.* kit.**

The kit is validated for the use of the following cyclers:

- AriaMx™ from Agilent,
- CFX96 Touch™ from Bio-Rad,
- CFX96 Touch™ Deep Well from Bio-Rad.

PCR results interpretation can be done using the:

- Evaluation sheet version 2
- Software PURE. Version 1.

The certificate references for this study are the following:

- BACGene *Listeria* Multiplex: EGS 38/05 - 03/17,
- BACGene *Listeria* spp.: EGS 38/02 - 01/17.

## 2 METHOD PROTOCOLS

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### 2.1 Alternative methods

#### 2.1.1 Principle

##### > **BACGene *Listeria* Multiplex**

DNA amplification and detection methods take advantage of the nucleotide sequence conservation found in bacterial genomes that ensures the potential for high specificity and sensitivity in detection of food-borne, pathogenic bacteria.

After enrichment, the microbial DNA is extracted by a simple thermal/ enzymatic lysis step and rapidly analysed by real time PCR.

Specific nucleotide sequences of the genus *Listeria* and of the species *Listeria monocytogenes* are amplified during PCR.

##### **BACGene *Listeria* spp.**

After enrichment, the microbial DNA is extracted by a simple thermal/enzymatic lysis step and rapidly analysed by real time PCR.

Specific nucleotide sequence of the genus *Listeria* is amplified during PCR.

#### 2.1.2 Protocol

The flow diagrams are provided in **Appendices 1 to 3**.

The available enrichment protocols per kit are described Table 2.

**Table 2 - Enrichment protocols available per kit**

BACGene Kit	Enrichment broth	Incubation time and temperature
<b>BACGene <i>Listeria</i> spp</b>	Pre-warmed (37°C ± 1°C) <b>Actero™ <i>Listeria</i> Enrichment media</b>	21 ± 3 h at 37°C ± 1°C
	Pre-warmed (37°C ± 1°C) <b>BACGRO ULTRA <i>Listeria</i> broth</b>	21 ± 3 h at 37°C ± 1°C
<b>BACGene <i>Listeria</i> Multiplex</b>	Pre-warmed (37°C ± 1°C) <b>Actero™ <i>Listeria</i> Enrichment media</b>	21 ± 3 h at 37°C ± 1°C

- Lysis step: 70 µl lysis buffer + 30 µl enrichment broth, heat treatment for 20 min at 37°C ± 2°C, and 10 min at 95°C ± 2°C.
- PCR test using the CFX96 from Bio-Rad (deep-well) and the AriaMx from Agilent with 5 µl lysate + 20 µl MasterMix.
- Confirmation by streaking 10 µl of Actero™ *Listeria* Enrichment media or 10 µL BACGRO ULTRA *Listeria* broth onto O&A and PALCAM plates. The only presence of typical colonies on the plates allows to confirm the positive PCR test.

The typical colonies can be confirmed by:

- The tests described in the reference method (gram, catalase, Camp test, and biochemical galleries);
- The MALDI Biotyper of Bruker (Software versions: Flex control 3.4, Flex analysis 3.4, MBT Compass explorer 4.1): colonies were confirmed from O&A, PALCAM and TSYEA plates. The protocols used for *Listeria* genus confirmation are described in **Appendix 2**. This method is dedicated to the confirmation of *Listeria* spp.. The identification of colonies is not part of the NF VALIDATION scope.

It is possible to store the **Actero™ *Listeria* Enrichment media** or the **BACGRO ULTRA *Listeria* broth** for 72 h at 5 ± 3°C to offer sufficient practicability to the users.

### 2.1.3 Restrictions

Neutralizing buffers containing arylsulfonate (sodium dodecylbenzene-sulfonate) are not recommended to be used for environmental samples with this kit.

## 2.2 Reference method ♦

The reference method is the ISO 11290-1 (May 2017): Microbiology of the food chain - Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp.- Part 1: detection method. The flow diagram is given in **Appendix 4**.

## 2.3 Study design

The study is an unpaired data study design, as the reference and the alternative methods have different primary enrichment procedures.

# 3 INITIAL VALIDATION STUDY AND EXTENSION/RENEWAL STUDIES: RESULTS USING THE ACTERO™ LISTERIA ENRICHMENT BROTH

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## 3.1 Method comparison study

*The study was carried out on a diversity of samples and strains representative of agri-food products. This does not constitute an exhaustive list of the different matrices included in the scope.*

*For any comment on the alternative method, please contact AFNOR Certification at <http://nf-validation.afnor.org/contact-2/>.*

**The Method Comparison Study is a study performed by the expert laboratory to compare the alternative method with the reference method.**

### 3.1.1 Sensitivity study

*The sensitivity (SE) is the ability of the method to detect the analyte by either the reference or alternative method.*

#### 3.1.1.1 Number and nature of samples

426 samples were analysed. The distribution per tested category and type is given in Table 3. The distribution per target analytes is given in Table 4.



**Table 3 – Distribution per tested category and type**

Category	Type	BACGene <i>Listeria</i> Multiplex						BACGene <i>Listeria</i> spp.						
		CFX96			AriaMx			CFX96			AriaMx			
		Positive	Negative	Total	Positive	Negative	Total	Positive	Negative	Total	Positive	Negative	Total	
1	Composite foods / Ready-to-eat and ready-to-reheat	a: Ready-to-eat	10	10	20	10	10	20	10	10	20	10	10	20
		b: Ready-to-reheat	10	10	20	10	10	20	10	10	20	10	10	20
		c: Confectionaries, pastries and egg products	11	10	21	11	10	21	11	10	21	11	10	21
		Total	31	30	61	31	30	61	31	30	61	31	30	61
2	Meat products	a: Raw products (frozen or fresh)	12	9	21	12	9	21	12	9	21	12	9	21
		b: Meat based products ready to reheat	11	10	21	11	10	21	11	10	21	11	10	21
		c: Raw and cooked delicatessen	8	12	20	8	12	20	8	12	20	8	12	20
		Total	31	31	62	31	31	62	31	31	62	31	31	62
3	Milk & dairy products	a: Raw milk cheeses	9	16	25	9	16	25	9	16	25	9	16	25
		b: Other products based on raw milk	13	8	21	13	8	21	13	8	21	13	8	21
		c: Heat treated products	16	8	24	15	9	24	16	8	24	16	8	24
		Total	38	32	70	37	33	70	38	32	70	38	32	70
4	Vegetables	a: Raw products (fresh and frozen)	15	17	32	15	17	32	15	17	32	15	17	32
		b: Pre-cooked vegetables, vegetables under modified atmosphere	15	20	35	15	20	35	15	20	35	15	20	35
		c: Ready to eat	10	11	21	10	11	21	10	11	21	10	11	21
		Total	40	48	88	40	48	88	40	48	88	40	48	88
5	Seafood and fishery products	a: Raw products (fresh and frozen)	16	11	27	16	11	27	16	11	27	16	11	27
		b: Cured & smoked	14	11	25	14	11	25	14	11	25	14	11	25
		c: Ready to eat, Ready to reheat	23	9	32	23	9	32	23	9	32	23	9	32
		Total	53	31	84	53	31	84	53	31	84	53	31	84
6	Environmental Samples	a: Dusts and Residues	10	10	20	10	10	20	10	10	20	10	10	20
		b: Cleaning and Process Waters	10	11	21	10	11	21	10	11	21	10	11	21
		c: Surface samples	10	10	20	10	10	20	10	10	20	10	10	20
		Total	30	31	61	30	31	61	30	31	61	30	31	61
<b>All categories</b>			<b>223</b>	<b>203</b>	<b>426</b>	<b>222</b>	<b>204</b>	<b>426</b>	<b>223</b>	<b>203</b>	<b>426</b>	<b>223</b>	<b>203</b>	<b>426</b>

**Table 4 – Distribution per target analytes**

Category	<i>Listeria spp</i> (A)		<i>Listeria spp</i> + <i>Listeria monocytogenes</i> (B)		Total (A+B)		<i>Listeria monocytogenes</i> (C)		Total positive samples
	Number of samples	%	Number of samples	%	Number of samples	%	Number of samples	%	
1	6	19.4%	9	29.0%	15	48.4%	16	51.6%	31
2	13	41.9%	7	22.6%	20	64.5%	11	35.5%	31
3	10	26.3%	9	23.7%	19	50.0%	19	50.0%	38
4	8	20.0%	13	32.5%	21	52.5%	19	47.5%	40
5	7	13.2%	7	13.2%	14	26.4%	39	73.6%	53
6	18	60.0%	7	23.3%	25	83.3%	5	16.7%	30
<b>Total</b>	<b>62</b>	<b>27.8%</b>	<b>52</b>	<b>23.3%</b>	<b>114</b>	<b>51.1%</b>	<b>109</b>	<b>48.9%</b>	<b>223</b>

According to the AFNOR technical rules, the number of samples contaminated with *Listeria spp.* and *Listeria monocytogenes* per category has to be comprised between 15 and 25 samples; it was the case for all the categories, except for seafood and fishery products category. This has been accepted by the AFNOR Technical Committee.

#### 3.1.1.2 Artificial contamination of samples

Artificial contaminations were done using the seeding protocol (storage for 48 h at 2 - 8°C). The same strain was not used to inoculate more than 6 samples.

The artificial contaminations are presented in **Appendix 5**.

The repartition of the positive samples per contamination level (natural and artificial) is provided in Table 5.

**Table 5 - Repartition of the positive samples per contamination level  
(natural and artificial)**

Thermo-cycler	Kit		Naturally contaminated	Artificially contaminated		Total
				< 3 CFU/sample	3 < x ≤ 10 CFU/sample	
CFX96	BACGene <i>Listeria</i> Multiplex	Number of samples	116	102	5	223
		%	52.0 %	43.9 %	4.0 %	100.0 %
	BACGene <i>Listeria</i> spp.	Number of samples	116	102	5	223
		%	52.0 %	45.7 %	2.2 %	100.0 %
AriaMx	BACGene <i>Listeria</i> Multiplex	Number of samples	115	102	5	222
		%	51.8 %	45.9 %	2.3 %	100.0 %
	BACGene <i>Listeria</i> spp.	Number of samples	116	102	5	223
		%	52.0 %	45.7 %	2.2 %	100.0 %

120 samples were artificially contaminated, using 46 different strains. Taking into account the 2 thermocyclers and the 2 kits tested, 107 gave a positive result. 102 samples were inoculated at level  $\leq 3$  CFU and 5 samples were inoculated between 3.4 and 4.8 CFU.

**52 % of the samples were naturally contaminated.**

### 3.1.1.3 Confirmation protocols

During the validation study (sensitivity and RLOD), all the samples (positive and negative) were confirmed by streaking 10  $\mu$ l of Actero™ *Listeria* Enrichment media onto O&A and PALCAM plates.

The samples which gave a negative PCR test and a negative confirmation test using the protocol of the alternative method, were confirmed as negative using the ISO 11290-1/A1 protocol: a subculture from Actero™ *Listeria* Enrichment media was run in Fraser broth (0.1 ml + 10 ml) for 48 h at 37°C before streaking onto O&A and PALCAM plates.

### 3.1.1.4 *Protocols applied during the validation study*

#### > ***Incubation time***

The minimum incubation time was tested for the enrichment step: 18 h at 37°C.

#### > ***Thermocyclers tested***

All the lysates were tested using the two thermocyclers: CFX96 from Bio-Rad and AriaMx from Agilent

#### > ***Confirmation protocols***

During the validation study (sensitivity and RLOD), all the samples (positive and negative) were confirmed by streaking 10 µl of Actero™ Listeria Enrichment media onto O&A.

The typical colonies were confirmed by the tests described in the ISO method after purification step and by the Maldi-Biotyper from Bruker, directly from O&A plates and after subculture on TSYEA plates.

The samples which gave a negative PCR test and a negative confirmation test using the protocol of the alternative method were confirmed as negative using the ISO 11290-1/A1 protocol: the Actero™ Listeria Enrichment media was subcultured in Fraser broth for 48 h at 37°C before streaking onto O&A and Palcam plates.

### 3.1.1.5 *Test results*

Raw data per category is given in **Appendix 6**. The results are given in the following table.

**Table 6 – Summary of results obtained with the reference and the alternative method**

Category		Kit	Thermocycler	PA	NA*	PD	ND**	PPNA	PPND	Total
1	Composite foods / Ready-to-eat and ready-to-reheat	BACGene <i>Listeria</i> Multiplex	CFX96	20	30	5	6	0	0	61
			AriaMx	20	29	5	6	1	0	61
		BACGene <i>Listeria</i> spp.	CFX96	20	28	5	6	2	0	61
			AriaMx	20	28	5	6	2	0	61
2	Meat products	BACGene <i>Listeria</i> Multiplex	CFX96	14	31	12	5	0	0	62
			AriaMx	14	29	12	5	2	0	62
		BACGene <i>Listeria</i> spp.	CFX96	14	31	12	5	0	0	62
			AriaMx	14	31	12	5	0	0	62
3	Milk & dairy products	BACGene <i>Listeria</i> Multiplex	CFX96	26	30	8	4	2	0	70
			AriaMx	26	32	7	3	1	1	70
		BACGene <i>Listeria</i> spp.	CFX96	26	32	8	3	0	1	70
			AriaMx	26	31	8	4	1	0	70
4	Vegetables	BACGene <i>Listeria</i> Multiplex	CFX96	24	46	9	7	2	0	88
			AriaMx	24	46	9	7	2	0	88
		BACGene <i>Listeria</i> spp.	CFX96	24	47	9	7	1	0	88
			AriaMx	24	47	9	7	1	0	88
5	Seafood and fishery products	BACGene <i>Listeria</i> Multiplex	CFX96	35	29	9	7	2	2	84
			AriaMx	35	29	9	8	2	1	84
		BACGene <i>Listeria</i> spp.	CFX96	35	31	9	7	0	2	84
			AriaMx	35	31	9	8	0	1	84
6	Environmental Samples	BACGene <i>Listeria</i> Multiplex	CFX96	18	29	7	5	2	0	61
			AriaMx	18	29	7	5	2	0	61
		BACGene <i>Listeria</i> spp.	CFX96	18	30	7	5	1	0	61
			AriaMx	18	30	7	5	1	0	61
All categories	BACGene <i>Listeria</i> Multiplex	CFX96	137	195	50	34	8	2	426	
		Aria Mx	137	194	49	34	10	2	426	
		BACGene <i>Listeria</i> spp.	CFX96	137	199	50	33	4	3	426
			Aria Mx	137	198	50	35	5	1	426

\* PPNA not included

\*\* PPND not included

PP: positive presumptive non confirmed samples

PD = positive deviation (R-/A+)

PA = positive agreement (R+/A+)

ND = negative deviation (R+/A-)

NA = negative agreement (R-/A-)

### 3.1.1.6 Calculation of the relative trueness (RT), the relative sensitivity (SE) and the false positive ratio (FPR)

The calculations are presented in Table 7.

- 7.1: CFX96 - BACGene *Listeria* Multiplex (target: *Listeria* spp.)
- 7.2: AriaMx - BACGene *Listeria* Multiplex (target: *Listeria* spp.)
- 7.3: CFX96 - BACGene *Listeria* spp.
- 7.4: AriaMx - BACGene *Listeria* spp.

**Table 7 – Calculation of the relative trueness (RT), the relative sensitivity (SE) and the false positive ratio (FPR)****Table 7.1: CFX96 - BACGene Listeria Multiplex (target: *Listeria spp.*)**

Category		Type	PA	NA*	PD	ND**	PPND	PPNA	SE <sub>alt</sub> %	SE <sub>ref</sub> %	RT %	FPR %
1	Composite foods / Ready-to-eat and ready-to-reheat	a Ready-to-eat	3	10	2	5	0	0	50.0	80.0	65.0	0
		b Ready-to-reheat	9	10	1	0	0	0	100.0	90.0	95.0	0.0
		c Confectionaries, pastries and egg products	8	10	2	1	0	0	90.9	81.8	85.7	0.0
		Total	20	30	5	6	0	0	80.6	83.9	82.0	0.0
2	Meat products	a Raw products (frozen or fresh)	6	9	4	2	0	0	83.3	66.7	71.4	0.0
		b Meat based products ready to reheat	6	10	4	1	0	0	90.9	63.6	76.2	0.0
		c Raw and cooked delicatessen	2	12	4	2	0	0	75.0	50.0	70.0	0.0
		Total	14	31	12	5	0	0	83.9	61.3	72.6	0.0
3	Milk & dairy products	a Raw milk cheeses	4	15	3	2	0	1	77.8	66.7	80.0	6.7
		b Other products based on raw milk	12	8	0	1	0	0	92.3	100.0	95.2	0.0
		c Heat treated products	10	7	5	1	0	1	93.8	68.8	75.0	14.3
		Total	26	30	8	4	0	2	89.5	78.9	82.9	6.3
4	Vegetables	a Raw products (fresh and frozen)	10	17	3	2	0	0	86.7	80.0	84.4	0.0
		b Pre-cooked vegetables, vegetables under modified atmosphere	7	18	5	3	0	2	80.0	66.7	77.1	11.1
		c Ready to eat	7	11	1	2	0	0	80.0	90.0	85.7	0.0
		Total	24	46	9	7	0	2	82.5	77.5	81.8	4.2
5	Seafood and fishery products	a Raw products (fresh and frozen)	7	9	5	4	0	2	75.0	68.8	66.7	22.2
		b Cured & smoked	10	11	0	3	1	0	71.4	100.0	84.0	9.1
		c Ready to eat, Ready to reheat	18	9	4	0	1	0	95.7	82.6	84.4	11.1
		Total	35	29	9	7	2	2	83.0	83.0	78.6	12.9
6	Environmental Samples	a Dusts and Residues	7	10	3	0	0	0	100.0	70.0	85.0	0.0
		b Cleaning and Process Waters	6	9	3	1	0	2	90.0	70.0	81.0	22.2
		c Surface samples	5	10	1	4	0	0	60.0	90.0	75.0	0.0
		Total	18	29	7	5	0	2	83.3	76.7	80.3	6.5
<b>All categories</b>			<b>137</b>	<b>195</b>	<b>50</b>	<b>34</b>	<b>2</b>	<b>8</b>	<b>83.9</b>	<b>77.6</b>	<b>79.8</b>	<b>4.9</b>

\* PPNA not included

\*\* PPND not included

Table 7.2: AriaMx - BACGene *Listeria* Multiplex (target: *Listeria* spp.)

Category		Type	PA	NA*	PD	ND**	PPND	PPNA	SE <sub>alt</sub> %	SE <sub>ref</sub> %	RT %	FPR %
1	Composite foods / Ready-to-eat and ready-to-reheat	a Ready-to-eat	3	10	2	5	0	0	50.0	80.0	65.0	0
		b Ready-to-reheat	9	9	1	0	0	1	100.0	90.0	95.0	11.1
		c Confectionaries, pastries and egg products	8	10	2	1	0	0	90.9	81.8	85.7	0.0
		Total	20	29	5	6	0	1	80,6	83.9	82.0	3.3
2	Meat products	a Raw products (frozen or fresh)	6	9	4	2	0	0	83.3	66.7	71.4	0.0
		b Meat based products ready to reheat	6	8	4	1	0	2	90.9	63.6	76.2	25.0
		c Raw and cooked delicatessen	2	12	4	2	0	0	75.0	50.0	70.0	0.0
		Total	14	29	12	5	0	2	83,9	61.3	72.6	6.5
3	Milk & dairy products	a Raw milk cheeses	4	16	3	2	0	0	77.8	66.7	80.0	0.0
		b Other products based on raw milk	12	7	0	1	0	1	92.3	100.0	95.2	14.3
		c Heat treated products	10	9	4	0	1	0	93.3	73.3	79.2	11.1
		Total	26	32	7	3	1	1	89,2	81.1	84.3	6.1
4	Vegetables	a Raw products (fresh and frozen)	10	17	3	2	0	0	86.7	80.0	84.4	0.0
		b Pre-cooked vegetables, vegetables under modified atmosphere	7	18	5	3	0	2	80.0	66.7	77.1	11.1
		c Ready to eat	7	11	1	2	0	0	80.0	90.0	85.7	0.0
		Total	24	46	9	7	0	2	82,5	77.5	81.8	4.2
5	Seafood and fishery products	a Raw products (fresh and frozen)	7	9	5	4	0	2	75.0	68.8	66.7	22.2
		b Cured & smoked	10	11	0	4	0	0	71.4	100.0	84.0	0.0
		c Ready to eat, Ready to reheat	18	9	4	0	1	0	95.7	82.6	84.4	11.1
		Total	35	29	9	8	1	2	83.0	83.0	78.6	9.7
6	Environmental Samples	a Dusts and Residues	7	9	3	0	0	1	100.0	70.0	85.0	11.1
		b Cleaning and Process Waters	6	10	3	1	0	1	90.0	70.0	81.0	10.0
		c Surface samples	5	10	1	4	0	0	60.0	90.0	75.0	0.0
		Total	18	29	7	5	0	2	83.3	76.7	80.3	6.5
<b>All categories</b>			<b>137</b>	<b>194</b>	<b>49</b>	<b>34</b>	<b>2</b>	<b>10</b>	<b>83.8</b>	<b>77.9</b>	<b>80.0</b>	<b>5.9</b>

\* PPNA not included

\*\* PPND not included



Table 7.3: CFX96 - BACGene *Listeria* spp.

Category		Type	PA	NA*	PD	ND**	PPND	PPNA	SE <sub>alt</sub> %	SE <sub>ref</sub> %	RT %	FPR %
1	Composite foods / Ready-to-eat and ready-to-reheat	a Ready-to-eat	3	10	2	5	0	0	50.0	80.0	65.0	0
		b Ready-to-reheat	9	8	1	0	0	2	100.0	90.0	95.0	25.0
		c Confectionaries, pastries and egg products	8	10	2	1	0	0	90.9	81.8	85.7	0.0
		Total	20	28	5	6	0	2	80.6	83.9	82.0	6.7
2	Meat products	a Raw products (frozen or fresh)	6	9	4	2	0	0	83.3	66.7	71.4	0.0
		b Meat based products ready to reheat	6	10	4	1	0	0	90.9	63.6	76.2	0.0
		c Raw and cooked delicatessen	2	12	4	2	0	0	75.0	50.0	70.0	0.0
		Total	14	31	12	5	0	0	83.9	61.3	72.6	0.0
3	Milk & dairy products	a Raw milk cheeses	4	16	3	2	0	0	77.8	66.7	80.0	0.0
		b Other products based on raw milk	12	8	0	1	0	0	92.3	100.0	95.2	0.0
		c Heat treated products	10	8	5	0	1	0	93.8	68.8	75.0	12.5
		Total	26	32	8	3	1	0	89.5	78.9	82.9	3.1
4	Vegetables	a Raw products (fresh and frozen)	10	17	3	2	0	0	86.7	80.0	84.4	0.0
		b Pre-cooked vegetables, vegetables under modified atmosphere	7	19	5	3	0	1	80.0	66.7	77.1	5.3
		c Ready to eat	7	11	1	2	0	0	80.0	90.0	85.7	0.0
		Total	24	47	9	7	0	1	82.5	77.5	81.8	2.1
5	Seafood and fishery products	a Raw products (fresh and frozen)	7	11	5	4	0	0	75.0	68.8	66.7	0.0
		b Cured & smoked	10	11	0	3	1	0	71.4	100.0	84.0	9.1
		c Ready to eat, Ready to reheat	18	9	4	0	1	0	95.7	82.6	84.4	11.1
		Total	35	31	9	7	2	0	83.0	83.0	78.6	6.5
6	Environmental Samples	a Dusts and Residues	7	10	3	0	0	0	100.0	70.0	85.0	0.0
		b Cleaning and Process Waters	6	10	3	1	0	1	90.0	70.0	81.0	10.0
		c Surface samples	5	10	1	4	0	0	60.0	90.0	75.0	0.0
		Total	18	30	7	5	0	1	83.3	76.7	80.3	3.2
<b>All categories</b>			<b>137</b>	<b>199</b>	<b>50</b>	<b>33</b>	<b>3</b>	<b>4</b>	<b>83.9</b>	<b>77.6</b>	<b>79.8</b>	<b>3.4</b>

\* PPNA not included

\*\* PPND not included

Table 7.4: AriaMx - BACGene *Listeria* spp. (target: *Listeria* spp.)

Category		Type	PA	NA*	PD	ND**	PPND	PPNA	SE <sub>alt</sub> %	SE <sub>ref</sub> %	RT %	FPR %
1	Composite foods / Ready-to-eat and ready-to-reheat	a Ready-to-eat	3	10	2	5	0	0	50.0	80.0	65.0	0
		b Ready-to-reheat	9	8	1	0	0	2	100.0	90.0	95.0	25.0
		c Confectionaries, pastries and egg products	8	10	2	1	0	0	90.9	81.8	85.7	0.0
		Total	20	28	5	6	0	2	80.6	83.9	82.0	6.7
2	Meat products	a Raw products (frozen or fresh)	6	9	4	2	0	0	83.3	66.7	71.4	0.0
		b Meat based products ready to reheat	6	10	4	1	0	0	90.9	63.6	76.2	0.0
		c Raw and cooked delicatessen	2	12	4	2	0	0	75.0	50.0	70.0	0.0
		Total	14	31	12	5	0	0	83.9	61.3	72.6	0.0
3	Milk & dairy products	a Raw milk cheeses	4	16	3	2	0	0	77.8	66.7	80.0	0.0
		b Other products based on raw milk	12	7	0	1	0	1	92.3	100.0	95.2	14.3
		c Heat treated products	10	8	5	1	0	0	93.8	68.8	75.0	0.0
		Total	26	31	8	4	0	1	89.5	78.9	82.9	3.1
4	Vegetables	a Raw products (fresh and frozen)	10	17	3	2	0	0	86.7	80.0	84.4	0.0
		b Pre-cooked vegetables, vegetables under modified atmosphere	7	19	5	3	0	1	80.0	66.7	77.1	5.3
		c Ready to eat	7	11	1	2	0	0	80.0	90.0	85.7	0.0
		Total	24	47	9	7	0	1	82.5	77.5	81.8	2.1
5	Seafood and fishery products	a Raw products (fresh and frozen)	7	11	5	4	0	0	75.0	68.8	66.7	0.0
		b Cured & smoked	10	11	0	4	0	0	71.4	100.0	84.0	0.0
		c Ready to eat, Ready to reheat	18	9	4	0	1	0	95.7	82.6	84.4	11.1
		Total	35	31	9	8	1	0	83.0	83.0	78.6	3.2
6	Environmental Samples	a Dusts and Residues	7	10	3	0	0	0	100.0	70.0	85.0	0.0
		b Cleaning and Process Waters	6	10	3	1	0	1	90.0	70.0	81.0	10.0
		c Surface samples	5	10	1	4	0	0	60.0	90.0	75.0	0.0
		Total	18	30	7	5	0	1	83.3	76.7	80.3	3.2
<b>All categories</b>			<b>137</b>	<b>198</b>	<b>50</b>	<b>35</b>	<b>1</b>	<b>5</b>	<b>83.9</b>	<b>77.6</b>	<b>79.8</b>	<b>3.0</b>

\* PPNA not included

\*\* PPND not included

The following results were observed:

**Table 8 - Summary of results**

		BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp	
		CFX96	AriaMx	CFX96	AriaMx
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA + PD)}{(PA + ND + PD)} \times 100\%$	83.9 %	83.8 %	83.9 %	83.9 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA + ND)}{(PA + ND + PD)} \times 100\%$	77.6 %	77.9 %	77.6 %	77.6 %
Relative trueness	$RT = \frac{(PA + NA)}{N} \times 100\%$	79.8 %	80.0 %	79.8 %	79.8 %
False positive ratio for the alternative method* FP = PPNA + PPND	$FPR = \frac{(FP)}{NA} \times 100\%$	4.9 %	5.9 %	3.4 %	3.0 %

\* With  $ND = ND + PPND$

$NA = NA + PPNA$

Only a fraction of the FP results was reproduced after storage for 72h at  $5^{\circ}\text{C} \pm 3^{\circ}\text{C}$ . Please see the table below for FP results before and after storage:

	BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.	
	CFX96	AriaMx	CFX96	AriaMx
Number of FP samples				
Before enrichment storage	10	12	7	6
After enrichment storage	2	2	3	3

### 3.1.1.7 Analysis of discordant results

The negative deviations are given in Table 9 and the positive deviations in Table 10.

#### > Negative deviations

36 negative deviations were observed for both kits tested and, on both thermocyclers, used for running the PCR. None of these samples were confirmed positive using the tests of the alternative method and the tests of the reference method (subculture in Fraser broth and streaking onto O&A and PALCAM plates). These results were probably due to the unpaired data study design.

13 samples were artificially contaminated and 23 naturally contaminated.

No sample in negative agreement (NA) was confirmed positive.

> **Positive deviations**

50 positive deviations were observed using the CFX96 (both kits) and for AriaMx with the *Listeria* spp. kit. For the BACGene *Listeria* Multiplex 49 positive deviations were obtained on the AriaMx. Sample 4330 gave a negative result (NA) in this case. Note that 3 PCR replicates were run for this sample and one positive result was obtained (Ct = 37.27). The positive deviations concern 21 artificially contaminated samples and 29 naturally contaminated samples.

Table 9 - Negative deviations

N° Sample	Product	Artificial contaminations		Alternative method: BACGene Listeria -Detection of Listeria spp														Category	Type
				Actero™ Listeria Enrichment Media for 18H at 37°C															
				BACGene Listeria Multiplex				All confirmatory tests	BACGene Listeria Multiplex				BACGene Listeria spp.				Subculture in Fraser (48h at 37°C)		
				CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)		Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h			
3989	Ready to eat surimi	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	1	a
4112	Sandwich	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	1	a
4288	Guacamole	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	1	a
4293	Salad	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	1	a
5023	Ham and cheese sandwich	<i>L.monocytogenes</i> Ad273	0,6	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	1	a
4192	Omelette	<i>L.monocytogenes</i> Ad1195	0,8	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	1	c
3722	Chicken meat	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	2	a
4109	Poultry meat	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	2	a
4200	Meat based products ready to reheat	<i>L.monocytogenes</i> Ad1206	2,4	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	2	b
4544	Smoked bacon	<i>L.welshimeri</i> Ad1204 / <i>L.monocytogenes</i> Ad267	2,0 / 1,8	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	2	c
4684	Ham	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	2	c
3342	Raw milk cheese	<i>L.monocytogenes</i> Ad664	0,4	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	3	a
4526	Raw goat's milk cheese	<i>L.monocytogenes</i> Ad613	1	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	3	a
4537	Fermented milk	<i>L.monocytogenes</i> Ad665	0,6	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	3	b
4309	Pasteurised milk cheese	<i>L.innocua</i> Ad657	1,4	-	+(36.55)/-/(38.82)	+(39.18)/+(39.70)/+(39.23)	-	-	-	ND	-	PPND	-	PPND	-	ND	-	3	c
3743	Corn	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	4	a
6716	Zucchini	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	4	a
4299	Tajine	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	4	b
4680	Pre-fried onions	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	4	b
6722	Vegetables RTRH preparation	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	4	b
4203	Seasoned sliced carrots	<i>L.welshimeri</i> Ad1668	0,6	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	4	c
4740	Deli salad	<i>L.monocytogenes</i> Ad1719	1,8	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	4	c
3000	Scallops	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	5	a
3729	Fish filet	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	5	a
4130	Fish filet	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	5	a
5801	White piece of fish	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	5	a
3728	Smoked salmon	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	5	b
4963	Smoked trout	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	5	b
4964	Smoked salmon	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	5	b
4966	Smoked salmon	/	/	+(39.69)/-/(39.16)	-	+(39.85)/-/(38.73)	-	-	-	PPND	-	ND	-	PPND	-	ND	-	5	b
3988	RTR fish	/	/	+(39.50)/+(37.55)/+(37.71)	+(37.80)/-/+38.89	+(38.66)/-/-	+(36.27)/-/-	-	-	PPND	-	PPND	-	PPND	-	PPND	-	5	c
6771	Rinsing water	<i>L.innocua</i> Ad1253	2,4	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	6	b
3358	Wipe (fish production)	<i>L.monocytogenes</i> Ad1272	2,8	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	6	c
3361	Wipe (fish production)	<i>L.innocua</i> Ad1266	0,5	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	6	c
5442	Wipe (Fish industry)	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	6	c
5445	Wipe (Fish industry)	/	/	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	-	6	c
<b>Total</b>										<b>36</b>	<b>36</b>	<b>36</b>	<b>36</b>						

Table 10 - Positive deviations

N° Sample	Product	Artificial contaminations		Alternative method: BACGene Listeria -Detection of Listeria spp												Category	Type	
				Actero™ Listeria Enrichment Media for 18H at 37°C														
				BACGene Listeria Multiplex		BACGene Listeria spp.		All confirmatory tests	BACGene Listeria Multiplex				BACGene Listeria spp.					
				CFX96 PCR result	AriaMx PCR result	CFX96 PCR result	AriaMx PCR result		Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx			Agreement AriaMx Ref/Alt 18h
Strain	Inoculation level /sample	(Ct)	(Ct)	(Ct)	(Ct)													
3985	Delicatessen	/	/	+(33.75)	+(32.58)	+(34.11)	+(32.61)	+	+	PD	+	PD	+	PD	+	PD	1	a
4121	Sandwich	/	/	+(35.49)	+(34.65)	+(34.37)	+(32.84)	+	+	PD	+	PD	+	PD	+	PD	1	a
5033	Ham and cheese pizza	<i>L.welshimeri</i> Ad1175/ <i>L.monocytogenes</i> Ad279	0,2/1,0	+(27.11)	+(28.60)	+(30.37)	+(28.63)	+	+	PD	+	PD	+	PD	+	PD	1	b
4748	Pastry	<i>L.monocytogenes</i> JL2862/ <i>L.innocua</i> Ad644	1,2/0,8	+(22.47)	+(21.12)	+(22.78)	+(22.01)	+	+	PD	+	PD	+	PD	+	PD	1	c
4750	Pastry	<i>L.monocytogenes</i> JL2862	1,2	+(28.46)	+(26.83)	+(29.50)	+(28.05)	+	+	PD	+	PD	+	PD	+	PD	1	c
3007	Meat product	/	/	+(37.44)	+(35.39)	+(38.27)	+(34.51)	+	+	PD	+	PD	+	PD	+	PD	2	a
3011	Meat product	/	/	+(29.01)	+(27.26)	+(29.24)	+(26.58)	+	+	PD	+	PD	+	PD	+	PD	2	a
3735	Ground beef	/	/	+(27.80)	+(26.53)	+(31.50)	+(26.75)	+	+	PD	+	PD	+	PD	+	PD	2	a
6841	Raw meat (veal)	/	/	+(22.35)	+(23.33)	+(26.09)	+(24.73)	+	+	PD	+	PD	+	PD	+	PD	2	a
3737	Seasoned pork meat	/	/	+(28.28)	+(27.21)	+(29.02)	+(27.05)	+	+	PD	+	PD	+	PD	+	PD	2	b
4124	Meat based products ready to reheat	/	/	+(33.42)	+(31.01)	+(31.98)	+(30.46)	+	+	PD	+	PD	+	PD	+	PD	2	b
4197	Meat based products ready to reheat	<i>L.innocua</i> 17765	0,6	+(24.72)	+(24.69)	+(26.61)	+(25.88)	+	+	PD	+	PD	+	PD	+	PD	2	b
4198	Meat based products ready to reheat	<i>L.welshimeri</i> Ad1221	4,8	+(26.00)	+(24.74)	+(27.19)	+(25.55)	+	+	PD	+	PD	+	PD	+	PD	2	b
3008	Merguez	/	/	+(33.44)	+(31.92)	+(34.04)	+(31.17)	+	+	PD	+	PD	+	PD	+	PD	2	c
3725	Delicatessen	/	/	+(29.72)	+(28.64)	+(30.39)	+(28.77)	+	+	PD	+	PD	+	PD	+	PD	2	c
4541	Salami	<i>L.monocytogenes</i> Ad267	1,8	+(32.31)	+(29.84)	+(39.18)	+(31.37)	+	+	PD	+	PD	+	PD	+	PD	2	c
4545	Cured ham	<i>L.welshimeri</i> Ad1204 / <i>L.monocytogenes</i> Ad267	2,0 / 1,8	+(31.24)	+(29.21)	+(24.33)	+(29.80)	+	+	PD	+	PD	+	PD	+	PD	2	c
3340	Raw milk cheese	<i>L.monocytogenes</i> Ad664	0,4	+(34.26)	+(32.59)	+(33.86)	+(31.71)	+	+	PD	+	PD	+	PD	+	PD	3	a
3990	Raw milk cheese	/	/	+(37.10)	+(36.85)	+(39.88)	+(35.90)	+	+	PD	+	PD	+	PD	+	PD	3	a
4529	Raw milk cheese	<i>L.monocytogenes</i> Ad613 / <i>L.welshimeri</i> Ad1667	1,0/1,4	+(31.25)	+(29.27)	+(31.69)	+(30.07)	+	+	PD	+	PD	+	PD	+	PD	3	a
3006	Butter	/	/	+(30.18)	+(28.29)	+(30.00)	+(27.46)	+	+	PD	+	PD	+	PD	+	PD	3	c
3349	Pasteurised milk cheese	<i>L.innocua</i> Ad657	0,2	+(38.15)	+(36.20)	+(39.10)	+(35.84)	+	+	PD	+	PD	+	PD	+	PD	3	c
4330	Pasteurised milk cheese	/	/	+(38.77)	-/-+(37.27)	+(40.15)	+(39.00)	+	+	PD	-	NA	+	PD	+	PD	3	c
5960	Pasteurised fermented milk	<i>L.monocytogenes</i> Ad610	3,4	+(23.13)	+(21.03)	+(25.07)	+(24.12)	+	+	PD	+	PD	+	PD	+	PD	3	c
5961	Pasteurised fermented milk	<i>L.monocytogenes</i> Ad611	1,6	+(22.00)	+(20.00)	+(21.91)	+(21.18)	+	+	PD	+	PD	+	PD	+	PD	3	c
3003	Carrots	/	/	+(27.26)	+(25.73)	+(27.28)	+(24.73)	+	+	PD	+	PD	+	PD	+	PD	4	a
4676	Broccoli	/	/	+(22.96)	+(21.26)	+(23.19)	+(21.94)	+	+	PD	+	PD	+	PD	+	PD	4	a
6717	Parsley	/	/	+(37.43)	+(34.41)	+(36.51)	+(35.41)	+	+	PD	+	PD	+	PD	+	PD	4	a
3740	Pre-cooked vegetables	/	/	+(39.16)	+(37.97)	+(40.61)	+(40.62)	+	+	PD	+	PD	+	PD	+	PD	4	b
3741	Pre-cooked mushrooms	/	/	+(31.13)	+(29.89)	+(31.91)	+(30.11)	+	+	PD	+	PD	+	PD	+	PD	4	b
6615	Vegetables preparation	/	/	+(35.54)	+(33.68)	+(36.99)	+(33.07)	+	+	PD	+	PD	+	PD	+	PD	4	b
6719	Vegetables RTRH preparation	/	/	+(30.91)	+(27.90)	+(30.47)	+(29.16)	+	+	PD	+	PD	+	PD	+	PD	4	b
6720	Vegetables RTRH preparation	/	/	+(39.78)	+(35.22)	+(39.42)	+(35.84)	+	+	PD	+	PD	+	PD	+	PD	4	b
4202	Seasoned grated carrots	<i>L.monocytogenes</i> Ad1719	1,2	+(31.38)	+(30.08)	+(32.30)	+(31.31)	+	+	PD	+	PD	+	PD	+	PD	4	c
4110	Fish product	/	/	+(39.78)	+(37.33)	+(38.00)	+(36.83)	+	+	PD	+	PD	+	PD	+	PD	5	a
4685	Fish fillet	/	/	+(28.11)	+(26.36)	+(27.90)	+(27.00)	+	+	PD	+	PD	+	PD	+	PD	5	a
4969	Scallops	/	/	+(34.73)	+(33.29)	+(35.68)	+(33.75)	+	+	PD	+	PD	+	PD	+	PD	5	a
5790	Salmon	/	/	+(23.88)	+(21.25)	+(25.10)	+(24.01)	+	+	PD	+	PD	+	PD	+	PD	5	a
5964	Raw peeled shrimp	<i>L.monocytogenes</i> Ad299	0,6	+(22.50)	+(20.34)	+(23.82)	+(22.60)	+	+	PD	+	PD	+	PD	+	PD	5	a

N° Sample	Product	Artificial contaminations		Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria</i> spp												Category	Type	
				Actero™ <i>Listeria</i> Enrichment Media for 18H at 37°C														
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		All confirmatory tests	BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.					
				CFX96 PCR result	AriaMx PCR result	CFX96 PCR result	AriaMx PCR result		Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx			Agreement AriaMx Ref/Alt 18h
Strain	Inoculation level /sample	(Ct)	(Ct)	(Ct)	(Ct)													
3732	RTR Fish	/	/	+(29.35)	+(27.94)	+(30.11)	+(27.91)	+	+	PD	+	PD	+	PD	+	PD	5	c
4292	RTR fish product	/	/	+(31.99)	+(30.31)	+(33.21)	+(32.29)	+	+	PD	+	PD	+	PD	+	PD	5	c
4315	Salmon rillettes	<i>L.monocytogenes</i> Ad888	2,6	+(19.27)	+(17.79)	+(19.95)	+(20.62)	+	+	PD	+	PD	+	PD	+	PD	5	c
5969	Surimi	<i>L.monocytogenes</i> Ad2522	3	+(16.14)	+(14.67)	+(17.69)	+(16.73)	+	+	PD	+	PD	+	PD	+	PD	5	c
3353	Dust (fish)	<i>L.seeligeri</i> Ad1267	0,4	+(37.69)	+(36.35)	+(39.83)	+(37.00)	+	+	PD	+	PD	+	PD	+	PD	6	a
4326	Waste (pork)	<i>L.innocua</i> Ad1251	1,6	+(34.40)	+(33.30)	+(36.73)	+(34.66)	+	+	PD	+	PD	+	PD	+	PD	6	a
6762	Waste (vegetables)	<i>L.welshimeri</i> Ad1668	2	+(38.42)	+(36.33)	+(39.61)	+(38.45)	+	+	PD	+	PD	+	PD	+	PD	6	a
3354	Process water (Pork and fish production)	<i>L.monocytogenes</i> Ad548	0,4	+(28.24)	+(26.51)	+(28.01)	+(25.82)	+	+	PD	+	PD	+	PD	+	PD	6	b
6685	Process water (fish industry)	/	/	+(20.53)	+(18.53)	+(20.22)	+(19.61)	+	+	PD	+	PD	+	PD	+	PD	6	b
6773	Rinsing water	<i>L.welshimeri</i> Ad1668	2	+(26.15)	+(23.42)	+(26.13)	+(24.97)	+	+	PD	+	PD	+	PD	+	PD	6	b
5452	Wipe after cleaning (Fish industry)	/	/	+(31.18)	+(29.71)	+(31.61)	+(30.51)	+	+	PD	+	PD	+	PD	+	PD	6	c
<b>Total</b>									<b>50</b>	<b>49</b>	<b>50</b>	<b>50</b>						

The analyses of discordant results according to the EN ISO 16140-2:2016 is given in the Table 11.

- Table 11.1: CFX96 - BACGene *Listeria* Multiplex
- Table 11.2: AriaMx - BACGene *Listeria* Multiplex
- Table 11.3: CFX96 - BACGene *Listeria* spp.
- Table 11.4: AriaMx - BACGene *Listeria* spp.

### Table 11 - Analyses of discordant results

Table 11.1 - CFX96 - BACGene *Listeria* Multiplex

Category	Type	PD	ND**	PPND	(ND+PPND)-PD	AL	
1	Composite foods / Ready-to-eat and ready-to-reheat	a	2	5	0	3	3
		b	1	0	0	-1	
		c	2	1	0	-1	
		Total	5	6	0	1	
2	Meat products	a	4	2	0	-2	3
		b	4	1	0	-3	
		c	4	2	0	-2	
		Total	12	5	0	-7	
3	Milk & dairy products	a	3	2	0	-1	3
		b	0	1	0	1	
		c	5	1	0	-4	
		Total	8	4	0	-4	
4	Vegetables	a	3	2	0	-1	3
		b	5	3	0	-2	
		c	1	2	0	1	
		Total	9	7	0	-2	
5	Seafood and fishery products	a	5	4	0	-1	3
		b	0	3	1	4	
		c	4	0	1	-3	
		Total	9	7	2	0	
6	Environmental Samples	a	3	0	0	-3	3
		b	3	1	0	-2	
		c	1	4	0	3	
		Total	7	5	0	-2	
<b>All categories</b>		<b>50</b>	<b>34</b>	<b>2</b>	<b>-14</b>	<b>6</b>	

\*\* PPND not included



Table 11.2 - AriaMx - BACGene *Listeria* Multiplex

Category		Type	PD	ND**	PPND	(ND+PPND)-PD	AL
1	Composite foods / Ready-to-eat and ready-to-reheat	a	2	5	0	3	3
		b	1	0	0	-1	
		c	2	1	0	-1	
		Total	5	6	0	1	
2	Meat products	a	4	2	0	-2	3
		b	4	1	0	-3	
		c	4	2	0	-2	
		Total	12	5	0	-7	
3	Milk & dairy products	a	3	2	0	-1	3
		b	0	1	0	1	
		c	4	0	1	-3	
		Total	7	3	1	-3	
4	Vegetables	a	3	2	0	-1	3
		b	5	3	0	-2	
		c	1	2	0	1	
		Total	9	7	0	-2	
5	Seafood and fishery products	a	5	4	0	-1	3
		b	0	4	0	4	
		c	4	0	1	-3	
		Total	9	8	1	0	
6	Environmental Samples	a	3	0	0	-3	3
		b	3	1	0	-2	
		c	1	4	0	3	
		Total	7	5	0	-2	
<b>All categories</b>			<b>49</b>	<b>34</b>	<b>2</b>	<b>-13</b>	<b>6</b>

\*\* PPND not included

Table 11.3 - CFX96 - BACGene *Listeria* spp.

Category		Type	PD	ND**	PPND	(ND+PPND)-PD	AL
1	Composite foods / Ready-to-eat and ready-to-reheat	a	2	5	0	3	3
		b	1	0	0	-1	
		c	2	1	0	-1	
		Total	5	6	0	1	
2	Meat products	a	4	2	0	-2	3
		b	4	1	0	-3	
		c	4	2	0	-2	
		Total	12	5	0	-7	
3	Milk & dairy products	a	3	2	0	-1	3
		b	0	1	0	1	
		c	5	0	1	-4	
		Total	8	3	1	-4	
4	Vegetables	a	3	2	0	-1	3
		b	5	3	0	-2	
		c	1	2	0	1	
		Total	9	7	0	-2	
5	Seafood and fishery products	a	5	4	0	-1	3
		b	0	3	1	4	
		c	4	0	1	-3	
		Total	9	7	2	0	
6	Environmental Samples	a	3	0	0	-3	3
		b	3	1	0	-2	
		c	1	4	0	3	
		Total	7	5	0	-2	
<b>All categories</b>			<b>50</b>	<b>33</b>	<b>3</b>	<b>-14</b>	<b>6</b>

\*\* PPND not included

Table 11.4 - AriaMx - BACGene *Listeria* spp.

Category		Type	PD	ND**	PPND	(ND+PPND)-PD	AL
1	Composite foods / Ready-to-eat and ready-to-reheat	a	2	5	0	3	3
		b	1	0	0	-1	
		c	2	1	0	-1	
		Total	5	6	0	1	
2	Meat products	a	4	2	0	-2	3
		b	4	1	0	-3	
		c	4	2	0	-2	
		Total	12	5	0	-7	
3	Milk & dairy products	a	3	2	0	-1	3
		b	0	1	0	1	
		c	5	1	0	-4	
		Total	8	4	0	-4	
4	Vegetables	a	3	2	0	-1	3
		b	5	3	0	-2	
		c	1	2	0	1	
		Total	9	7	0	-2	
5	Seafood and fishery products	a	5	4	0	-1	3
		b	0	4	0	4	
		c	4	0	1	-3	
		Total	9	8	1	0	
6	Environmental Samples	a	3	0	0	-3	3
		b	3	1	0	-2	
		c	1	4	0	3	
		Total	7	5	0	-2	
<b>All categories</b>			<b>50</b>	<b>35</b>	<b>1</b>	<b>-14</b>	<b>6</b>

\*\* PPND not included

The observed values for ND - PD meet the acceptability limit for each category and for all the categories combined for both thermocyclers and kits tested.

### 3.1.1.8 Enrichment broth storage at 5°C ± 3°C for 72 h

247 samples were tested again after storage of Actero™ *Listeria* Enrichment media at 2 - 8°C for 72 h. The following changes were observed (See Table 12).

**Table 12 - Changes after storage for 72 h at 5°C ± 3°C**

CFX96: BACGene <i>Listeria</i> Multiplex				
Sample	Before storage	After storage 72h at 5°C ± 3°C	Category	Type
4535	PA	ND	3	b
4964	ND	PA	5	b
5954	NA	PD	3	b

CFX96: BACGene <i>Listeria</i> spp				
Sample	Before storage	After storage 72h at 5°C ± 3°C	Category	Type
4535	PA	ND	3	b
4964	ND	PA	5	b
5954	NA	PD	3	b

AriaMx: BACGene <i>Listeria</i> Multiplex				
Sample	Before storage	After storage 72h at 5°C ± 3°C	Category	Type
3740	PD	NA	4	b
4330	NA	PD	3	c
4535	PA	ND	3	b
4964	ND	PA	5	b
5954	PPNA	PD	3	b
6720	PD	NA	4	b

AriaMx: BACGene <i>Listeria</i> spp				
Sample	Before storage	After storage 72h at 5°C ± 3°C	Category	Type
4535	PA	ND	3	b
4964	ND	PA	5	b
5954	PPNA	PD	3	b
6720	PD	NA	4	b

Taking into account the results observed after storage of Actero™ *Listeria* Enrichment media for 72 h at 5°C ± 3°C, the analysis of discordant results become (See Table 13).

- Table 13.1: CFX96 - BACGene *Listeria* Multiplex
- Table 13.2: AriaMx - BACGene *Listeria* Multiplex
- Table 13.3: CFX96 - BACGene *Listeria* spp.
- Table 13.4: AriaMx - BACGene *Listeria* spp.

**Table 13 - Analysis of discordant results****Table 13.1 - CFX96 - BACGene *Listeria* Multiplex**

Category		Type	PD	ND**	PPND	(ND+PPND)-PD	AL
1	Composite foods / Ready-to-eat and ready-to-reheat	a Ready-to-eat	2	5	0	3	
		b Ready-to-reheat	1	0	0	-1	
		c Confectionaries, pastries and egg products	2	1	0	-1	
		Total	5	6	0	1	
2	Meat products	a Raw products (frozen or fresh)	4	2	0	-2	
		b Meat based products ready to reheat	4	1	0	-3	
		c Raw and cooked delicatessen	4	1	1	-2	
		Total	12	4	1	-7	
3	Milk & dairy products	a Raw milk cheeses	3	2	0	-1	
		b Other products based on raw milk	1	1	1	1	
		c Heat treated products	5	1	0	-4	
		Total	9	4	1	-4	
4	Vegetables	a Raw products (fresh and frozen)	3	2	0	-1	
		b Pre-cooked vegetables, vegetables under modified atmosphere	5	3	0	-2	
		c Ready to eat	1	2	0	1	
		Total	9	7	0	-2	
5	Seafood and fishery products	a Raw products (fresh and frozen)	5	3	1	-1	
		b Cured & smoked	0	2	1	3	
		c Ready to eat, Ready to reheat	4	1	0	-3	
		Total	9	6	2	-1	
6	Environmental Samples	a Dusts and Residues	3	0	0	-3	
		b Cleaning and Process Waters	3	1	0	-2	
		c Surface samples	1	4	0	3	
		Total	7	5	0	-2	
<b>All categories</b>			<b>51</b>	<b>32</b>	<b>4</b>	<b>-15</b>	<b>6</b>

\*\* PPND not included

Table 13.2 - AriaMx - BACGene *Listeria* Multiplex

Category		Type	PD	ND**	PPND	(ND+PPND)-PD	AL
1	Composite foods / Ready-to-eat and ready-to-reheat	a Ready-to-eat	2	5	0	3	
		b Ready-to-reheat	1	0	0	-1	
		c Confectionaries, pastries and egg products	2	1	0	-1	
		Total	5	6	0	1	
2	Meat products	a Raw products (frozen or fresh)	4	2	0	-2	
		b Meat based products ready to reheat	4	0	1	-3	
		c Raw and cooked delicatessen	4	1	1	-2	
		Total	12	3	2	-7	
3	Milk & dairy products	a Raw milk cheeses	3	2	0	-1	
		b Other products based on raw milk	1	2	0	1	
		c Heat treated products	5	1	0	-4	
		Total	9	5	0	-4	
4	Vegetables	a Raw products (fresh and frozen)	3	2	0	-1	
		b Pre-cooked vegetables, vegetables under modified atmosphere	3	3	0	0	
		c Ready to eat	1	2	0	1	
		Total	7	7	0	0	
5	Seafood and fishery products	a Raw products (fresh and frozen)	5	3	1	-1	
		b Cured & smoked	0	3	0	3	
		c Ready to eat, Ready to reheat	4	1	0	-3	
		Total	9	7	1	-1	
6	Environmental Samples	a Dusts and Residues	3	0	0	-3	
		b Cleaning and Process Waters	3	1	0	-2	
		c Surface samples	1	4	0	3	
		Total	7	5	0	-2	
<b>All categories</b>			<b>49</b>	<b>33</b>	<b>3</b>	<b>-13</b>	<b>6</b>

\*\* PPND not included

Table 13.3 - CFX96 - BACGene *Listeria* spp.

2

Category		Type	PD	ND**	PPND	(ND+PPND)-PD	AL
1	Composite foods / Ready-to-eat and ready-to-reheat	a Ready-to-eat	2	5	0	3	3
		b Ready-to-reheat	1	0	0	-1	
		c Confectionaries, pastries and egg products	2	1	0	-1	
		Total	5	6	0	1	
2	Meat products	a Raw products (frozen or fresh)	4	2	0	-2	3
		b Meat based products ready to reheat	4	1	0	-3	
		c Raw and cooked delicatessen	4	1	1	-2	
		Total	12	4	1	-7	
3	Milk & dairy products	a Raw milk cheeses	3	2	0	-1	3
		b Other products based on raw milk	1	1	1	1	
		c Heat treated products	5	1	0	-4	
		Total	9	4	1	-4	
4	Vegetables	a Raw products (fresh and frozen)	3	2	0	-1	3
		b Pre-cooked vegetables, vegetables under modified atmosphere	5	3	0	-2	
		c Ready to eat	1	2	0	1	
		Total	9	7	0	-2	
5	Seafood and fishery products	a Raw products (fresh and frozen)	5	3	1	-1	3
		b Cured & smoked	0	2	1	3	
		c Ready to eat, Ready to reheat	4	1	0	-3	
		Total	9	6	2	-1	
6	Environmental Samples	a Dusts and Residues	3	0	0	-3	3
		b Cleaning and Process Waters	3	1	0	-2	
		c Surface samples	1	4	0	3	
		Total	7	5	0	-2	
<b>All categories</b>			<b>51</b>	<b>32</b>	<b>4</b>	<b>-15</b>	<b>6</b>

\*\* PPND not included

Table 13.4 - AriaMx - BACGene *Listeria* spp.

Category		Type	PD	ND**	PPND	(ND+PPND)-PD	AL
1	Composite foods / Ready-to-eat and ready-to-reheat	a Ready-to-eat	2	5	0	3	3
		b Ready-to-reheat	1	0	0	-1	
		c Confectionaries, pastries and egg products	2	1	0	-1	
		Total	5	6	0	1	
2	Meat products	a Raw products (frozen or fresh)	4	2	0	-2	3
		b Meat based products ready to reheat	4	1	0	-3	
		c Raw and cooked delicatessen	4	1	1	-2	
		Total	12	4	1	-7	
3	Milk & Dairy products	a Raw milk cheeses	3	2	0	-1	3
		b Other products based on raw milk	1	1	1	1	
		c Heat treated products	5	1	0	-4	
		Total	9	4	1	-4	
4	Vegetables	a Raw products (fresh and frozen)	3	2	0	-1	3
		b Pre-cooked vegetables, vegetables under modified atmosphere	4	3	0	-1	
		c Ready to eat	1	2	0	1	
		Total	8	7	0	-1	
5	Seafood and fishery products	a Raw products (fresh and frozen)	5	3	1	-1	3
		b Cured & smoked	0	3	0	3	
		c Ready to eat, Ready to reheat	4	1	0	-3	
		Total	9	7	1	-1	
6	Environmental Samples	a Dusts and Residues	3	0	0	-3	3
		b Cleaning and Process Waters	3	1	0	-2	
		c Surface samples	1	4	0	3	
		Total	7	5	0	-2	
<b>All categories</b>			<b>50</b>	<b>33</b>	<b>3</b>	<b>-14</b>	<b>6</b>

\*\* PPND not included

The observed values for ND - PD meet the acceptability limit for each category and for all the categories combined for both thermocyclers and kits tested.

### 3.1.1.9 Confirmation

#### > Streaking onto selective agar plates

The positive BACGene results were confirmed by streaking 10 µl of Actero™ *Listeria* Enrichment media onto O&A and PALCAM plates.

For 39 samples, no typical colony was observed on PALCAM plates while typical *Listeria* colonies grew on O&A plates (See Table 14).



**Table 14 - Differences observed between streaking onto O&A and PALCAM plates**

Samples No	O&A	Identification	PALCAM
3006	H-d/H+ (after subculture in Fraser)	<i>L. monocytogenes</i>	-
3340	H+	<i>L. monocytogenes</i>	-
3353	+(1)	<i>L. seeligeri</i>	st
3727	H-	<i>L. innocua</i>	-
3732	H+	<i>L. monocytogenes</i>	-
3736	H-/H+	<i>L. welshimeri/L. monocytogenes</i>	-
3740	H-d	<i>L. seeligeri</i>	-
3745	H+	<i>L. monocytogenes</i>	-
3994	H+/H-	<i>L. monocytogenes/L. innocua</i>	-
4114	H+	<i>L. monocytogenes</i>	-
4116	H+	<i>L. monocytogenes</i>	-
4117	H+	<i>L. monocytogenes</i>	-
4118	H-	<i>L. innocua</i>	-
4124	H-/H+	<i>L. welshimeri/L. monocytogenes</i>	-
4128	H+/H-	<i>L. monocytogenes/L. welshimeri</i>	-
4291	1H+	<i>L. monocytogenes</i>	-
4295	H+	<i>L. monocytogenes</i>	-
4528	H-	No identification	-
4529	H+	No identification	-
4530	H-	No identification	-
4750	H+	<i>L. monocytogenes</i>	-
5030	-(H- after subculture in Fraser)	<i>L. welshimeri</i>	-
5033	H+	<i>L. monocytogenes</i>	-
5800	H+	<i>L. monocytogenes</i>	-
5803	H+	<i>L. monocytogenes</i>	-
5953	H+	<i>L. monocytogenes</i>	-
5965	H+	<i>L. monocytogenes</i>	-
5968	H+	<i>L. monocytogenes</i>	-
6615	H+(1)	<i>L. monocytogenes</i>	-
6685	H-	<i>L. innocua</i>	-
6713	H+	<i>L. monocytogenes</i>	-
6714	H-d	<i>L. innocua</i>	-
6717	-(H- after subculture in Fraser)	<i>L. innocua</i>	-
6719	H+	<i>L. monocytogenes</i>	-
6720	-(H- after subculture in Fraser)	<i>L. welshimeri</i>	-
6721	-(H- after subculture in Fraser)	<i>L. monocytogenes</i>	-
6724	H+	<i>L. monocytogenes</i>	-
6728	H+d	<i>L. monocytogenes</i>	-
6762	-(H- after subculture in Fraser)	<i>L. welshimeri</i>	-

Result after 48h at 37°C

Note that in 7 cases, a subculture of Actero™ *Listeria* Enrichment media was necessary to recover the *Listeria* strains.

### > Confirmation of the typical colonies

The typical colonies isolated on O&A, PALCAM and TSYEA plates were confirmed using the tests of the reference method and the MALDI Biotyper of Bruker.

220 colonies were tested from O&A, 150 from PALCAM and 220 from TSYEA using the tests of the reference method and MALDI-TOF tests. A summary of the results observed is provided in Table 15.

**Table 15 - Confirmation of colonies isolated from O&A and PALCAM**

		Total colonies tested	Tests of the reference method		Total colonies tested	MALDI-TOF		
			<i>Listeria</i> spp +	NI or NC		<i>Listeria</i> spp +	NI or NC	Not tested <sup>(1)</sup>
Typical colonies	O&A	220	207	13	211	211	0	9
	PALCAM	150	148	2	149	149	0	1
	TSYEA (Typical colonies isolated from O&A or PALCAM)	220	212	8	211	211	0	9
<b>Total</b>		<b>590</b>	<b>567</b>	<b>23</b>	<b>571</b>	<b>571</b>	<b>0</b>	<b>19</b>

NI: no identification

NC: non characteristic colony

(1) Some colonies were not tested as they were isolated from samples giving negative PCR tests.

The confirmation results provided by the MALDI Biotyper of Bruker were in agreement with those observed by the tests of the reference method for the colonies isolated from the 3 plates (O&A, PALCAM and TSYEA).

Note that in 7 cases, it was necessary to analyse the colonies again as no peak was observed during the tests; this was due to a lack of biological material on the slide ("No result" in the raw data tables).

#### 3.1.1.10 PCR inhibitions

673 DNA extracts were tested with the CFX96 and the AriaMx using 2 different kits, representing a total of 2692 PCR tests.

The PCR was inhibited for one sample only using both thermocyclers (BACGene *Listeria* Multiplex kit). The DNA extract was tested again without applying any dilution and a negative result was then observed (See Table 16).

**Table 16 - Sample with PCR inhibition**

Sample No	Product	BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.	
		CFX96	AriaMx	CFX96	AriaMx
5794	Artichoke puree	i/-	i/-	-	-

### 3.1.2 Relative level of detection

The relative level of detection is the level of detection at  $P = 0.50$  ( $LOD_{50}$ ) of the alternative (proprietary) method divided by the level of detection at  $P = 0.50$  ( $LOD_{50}$ ) of the reference method.

The RLOD is defined as the ratio of the alternative and reference methods:

$$RLOD = \frac{LOD_{Alt.}}{LOD_{Ref.}}$$

#### 3.1.2.1 Experimental design

Six (matrix/strain) pairs were analysed by the reference method and by the alternative method using the 2 thermocyclers (CFX96 and AriaMx) and the 2 kits (BACGene *Listeria* Multiplex and BACGene *Listeria* spp.) (See Table 17).

The following protocol was applied:

- A negative control: 5 samples,
- A low contamination level providing fractional recovery data, with 20 replicates,
- A high contamination level, with 5 replicates.

A total plate count determination on each matrix was performed to estimate the total microbial load on the day of analysis.

**Table 17 - Defined (matrix/strain) pairs for RLOD determination**

Matrix and related category number	Inoculated strain	Origin	Inoculation protocol
① - Deli-salad (Piémontaise)	<i>Listeria monocytogenes</i> Ad494	Deli salad	Seeding protocol Storage for 48h at 2-8°C
② - Frankfurters	<i>Listeria monocytogenes</i> Ad669	Rillettes	
③ - Soft white cheese	<i>Listeria ivanovii</i> Ad1337	Cheese	
④ - Cantaloupe (frozen balls)	<i>Listeria seeligeri</i> Ad1754	Zucchini	Seeding protocol Storage for 2 weeks at - 20°C
⑤ - Frozen shrimp	<i>Listeria innocua</i> Ad1200	Pollock	Seeding protocol Storage for 2 weeks at - 20°C
⑥ - Process water	<i>Listeria monocytogenes</i> Ad551	Environmental sample	Seeding protocol Storage 48h at 2 - 8°C

### 3.1.2.2 Calculation and interpretation of the RLOD

The raw data are given in **Appendix 7**.

The RLOD calculations were performed using the Excel spreadsheet of the international standard (ISO 16140), as described in the EN ISO 16140-2:2016 (<http://standards.iso.org/iso/16140>). The RLOD values are shown in Table 18.

The same results were observed with the 2 thermocyclers and the 2 kits.

**Table 18 – Presentation of RLOD before and after confirmation of the alternative method results using the 2 thermocyclers (CFX96 and AriaMx) and the 2 kits (BACGene *Listeria* Multiplex and BACGene *Listeria* spp.)**

Category	(Strain / matrix) pair	RLOD	RLODL	RLODU	b=ln(RLOD)	sd(b)	z-Test statistic	p-value
1	Ready to eat Deli salad/ <i>Listeria monocytogenes</i> Ad494	0.748	0.338	1.655	-0.290	0.397	0.731	1.535
2	Frankfurter/ <i>Listeria monocytogenes</i> Ad669	0.888	0.439	1.795	-0.119	0.352	0.339	1.265
3	Soft white cheese/ <i>Listeria ivanovii</i> Ad1337	1.314	0.576	2.996	0.273	0.412	0.663	0.508
4	Cantaloupe/ <i>Listeria seeligeri</i> Ad1754	0.437	0.208	0.914	-0.829	0.370	2.243	1.975
5	Shrimp/ <i>Listeria innocua</i> Ad1200	1.513	0.668	3.429	0.414	0.409	1.012	0.312
6	Process water/ <i>Listeria monocytogenes</i> Ad551	0.569	0.233	1.389	-0.563	0.446	1.263	1.793
	<b>Combined</b>	<b>0.843</b>	<b>0.625</b>	<b>1.138</b>	<b>-0.170</b>	<b>0.150</b>	<b>1.138</b>	<b>1.745</b>

The LOD<sub>50%</sub> calculations according to Wilrich & Wilrich POD-LOD calculation program - version 9, 2017-09-23 test are given in Table 19.

**Table 19 - LOD<sub>50</sub> results**

Category	(Strain / matrix) pair	Level of detection at 50% (CFU / sample size) according to Wilrich & Wilrich <sup>1</sup>	
		Reference method	Alternative method
1	Deli-salad (Piémontaise) / <i>Listeria monocytogenes</i> Ad494	0.607 [0.359;1.028]	0.465 [0.273;0.794]
2	Frankfurters / <i>Listeria monocytogenes</i> Ad669	0.509 [0.306;0.849]	0.455 [0.273;0.758]
3	Soft white cheese / <i>Listeria ivanovii</i> Ad1337	0.550 [0.325;0.928]	0.695 [0.409;1.181]
4	Cantaloupe (frozen balls) / <i>Listeria seeligeri</i> Ad1754	0.770 [0.441 ;1.345]	0.359 [0.210 ;0.613]
5	Frozen shrimp / <i>Listeria innocua</i> Ad1200	0.481 [0.285;0.810]	0.688 [0.407;1.165]
6	Process water / <i>Listeria monocytogenes</i> Ad551	0.601 [0.342;1.054]	0.378 [0.222;0.646]
<b>Combined results</b>		<b>0.580 [0.467 ;0.720]</b>	<b>0.496 [0.400 ;0.615]</b>

The RLOD values meet the AL fixed at 2.5 for an unpaired study design for all the tested matrix/strain pairs and for the alternative method for both thermocyclers and kits tested.

The LOD<sub>50</sub> varies from 0.5 to 0.8 CFU/sample size for the reference method and from 0.4 to 0.7 CFU/ sample size for the alternative method.

### 3.1.3 Inclusivity / exclusivity

The inclusivity is the ability of the alternative method to detect the target analyte from a wide range of strains. The exclusivity is the lack of interference from a relevant range of non-target strains of the alternative method.

#### 3.1.3.1 Test protocols

53 targeted strains (20 *Listeria monocytogenes* and 33 *Listeria* spp. different from *Listeria monocytogenes*) and 31 non targeted strains were tested. 32 additional *Listeria monocytogenes* strains were tested with only the BACGene *Listeria* Multiplex (target: *Listeria* spp.).

<sup>1</sup> Wilrich, C., and P.-Th. Wilrich: Estimation of the POD function and the LOD of a qualitative microbiological measurement method. AOAC International **92** (2009) 1763 - 1772.

### > Inclusivity

*Listeria* spp. strain cultures were performed in BHI medium at 37°C. Dilutions were done in order to inoculate 10 to 100 cells/225 ml Actero™ *Listeria* Enrichment media. The broths were incubated for 18 h at 37°C. The alternative method protocol was then performed using the two kits and two thermocyclers. Confirmation tests were run by streaking the Actero™ *Listeria* Enrichment media onto O&A and PALCAM plates, and TSYEA. The colonies were confirmed by the MALDI Biotyper of Bruker.

### > Exclusivity

Negative strain cultures were performed in BHI at 37°C. Dilutions were carried out in order to inoculate around 10<sup>5</sup> cells/ml BPW. BPW was incubated for 24 h at 37°C. The alternative protocol was then performed using the two kits and the two thermocyclers.

#### 3.1.3.2 Results

Raw data is given in **Appendix 8**.

### > Inclusivity

All tested strains gave positive PCR results. The strains showed typical colonies on selective agar plates. All colonies were confirmed as *Listeria* spp. using the MALDI Biotyper of Bruker independent from the plate of origin.

### > Exclusivity

No cross reaction was observed with the 31 non target strains tested.

### 3.1.4 Practicability

The alternative method practicability was evaluated according to the AFNOR criteria relative to method comparison study.

<b>Storage conditions. shelf-life and modalities of utilisation after first use</b>	The storage temperature is 2 - 8°C. The shelf-life is given on the package. All the reagents shall be stored at the temperature mentioned on the package.		
<b>Time to result</b>	<b>Steps</b>	<b>Reference method ISO 11290-1 (2017)</b>	<b>Alternative method</b>
	<b>Negative samples</b>		
	Sampling enrichment	Day 0	Day 0
	Subculture in Fraser 1	Day 1	/
	Lysate	/	Day 1
	PCR test	/	Day 1
	Streaking onto plates (O1/P1)	Day 1	/
	Second streaking (O2/P2)	Day 2	/
	Reading plates (O1/P1)	Day 2 - Day 3	/
	Reading plates (O2/P2)	Day 3 - Day 4	/
	Results	Day 4	Day 1
	<b>Presumptive positive or positive results</b>		
	Subculture of typical colonies	Day 3 - Day 4	/
	Streaking onto plates	/	Day 1
	Reading plates	/	Day 2 - Day 3
	Confirmatory tests	Day 4 - Day 5	Day 2 - Day 3
	Results	Day 4 - Day 6 Day 7 - Day 10 <sup>(1)</sup>	Day 2 - Day 3
<sup>(1)</sup> In the case of rhamnose and xylose tests are carried out in tubes.			
<b>Common step with the reference method</b>	Sampling enrichment		

The negative results are available in 1 day and the positive results in 2 or 3 days.

## 3.2 Inter-laboratory study

***The inter-laboratory study is a study performed by multiple laboratories testing identical samples at the same time, the results of which are used to estimate alternative-method performance parameters.***

### 3.2.1 Study organisation

#### > Collaborators number

Samples were sent to 16 collaborators.

#### > Matrix and strain used

Pasteurised cheese samples (31 % fat, 1.4 % NaCl) were contaminated by *Listeria monocytogenes* 153 isolated from raw milk cheese.

#### > Samples

Samples were prepared and inoculated on Monday 5<sup>th</sup> December 2016, as described below:

- 24 blind coded samples for detection of *Listeria monocytogenes* by the ISO 11290-1/A1 reference method which included the detection of *Listeria spp.*,
- 24 blind coded samples for *Listeria spp.* and *Listeria monocytogenes* detection by the BACGene *Listeria spp.* and the BACGene *Listeria* Multiplex methods,
- 1 sample for aerobic mesophilic flora enumeration by ISO 4833-1 method,
- 1 water flask labelled "Temperature Control" with a temperature probe.

#### > Inoculation

The targeted inoculation levels were the following:

- 0 CFU/25 g,
- 1 CFU/25 g (level providing fractional positive results),
- 5 CFU/25 g.



### > Labelling and shipping

Blind coded samples were placed in isothermal boxes, which contained cooling blocks, and express-shipped to the different laboratories.

A temperature control flask containing a sensor was added to the package in order to register the temperature profile during the transport, the package delivery and storage until analyses.

Samples were shipped in 24 h to 48 h to the involved laboratories. The temperature conditions had to stay lower or equal to 8°C during transport, and between 0°C – 8°C in the labs.

### > Analyses

Collaborative study laboratories and the expert laboratory carried out the analyses on Tuesday the 6<sup>th</sup> of December 2016 or Wednesday the 7<sup>th</sup> of December 2016 with the alternative and reference methods. **The analyses by the reference method and the alternative method were performed on the same day.**

Note that for the inter-laboratory study, 8 collaborators used the AriaMx from Agilent and 8 collaborators used the CFX96 from Bio-Rad.

## 3.2.2 Experimental parameters control

### 3.2.2.1 Strain stability and background microflora stability

Strain stability was checked by inoculating the matrix at 100 CFU/g and 1 CFU/g. Enumerations were performed for the high contamination level and detection analyses were performed for the low contamination level after 24 h and 48 h storage at 5°C ± 3°C. *Triplicates* were analysed. The aerobic mesophilic flora was also enumerated; the results are given in Table 20.

**Table 20 - Sample stability**

Day	Reference method (research)			CFU/g (XLD)			Aerobic mesophilic flora (CFU/g)
	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3	
Day 0	-	+	+	115.4	100.9	103.6	5.1 10 <sup>8</sup>
Day 1	+	-	+	89.1	95.5	88.2	5.7 10 <sup>8</sup>
Day 2	+	+	-	95.5	100.9	106.4	5.5 10 <sup>8</sup>

No evolution was observed during storage at 5°C ± 3°C.

### 3.2.2.2 Contamination levels

The contamination levels and the sample codification were the following (see Table 21).

**Table 21 - Contamination levels**

Level	Samples	Theoretical target level (b/25 g)	True level (b/25 g sample)	Low limit / 25 g sample	High limit / 25 g sample
Level 0	3 - 5 - 10 - 13 - 17 - 18 - 21 - 24	0	/	/	/
Low level	1 - 4 - 7 - 9 - 11 - 16 - 20 - 23	1	0.9	0.6	1.2
High level	2 - 6 - 8 - 12 - 14 - 15 - 19 - 22	5	3.7	2.6	5.1

### 3.2.2.3 Logistic conditions

Temperature conditions are given in Table 22.

**Table 22 - Sample temperatures at receipt**

Laboratories	Temperature measured by the probe (°C)	Temperature measured at receipt (°C)	Receipt date and time
A	2.0	3.5	06/12/2016 10:00 PM
B	1.5	4.1	06/12/2016 12:00 PM
C	2.0	3.8	06/12/2016 11:00 AM
D	5.0	2.4	06/12/2016 01:00 PM
E	3.5	4.5	06/12/2016 02:00 PM
F	3.0	2.7	06/12/2016 03:00 AM
G	2.0	3.9	06/12/2016 10:00 AM
H	2.0	3.6	06/12/2016 09:30 AM
I	2.0	5.9	06/12/2016 01:30 PM
J	3.0	4.7	06/12/2016 12:30 AM
K	1.5	3.4	06/12/2016 10:00 AM
L	3.5	3.6	06/12/2016 01:00 PM
M	<i>Not received</i>	2.5	06/12/2016 09:30 AM
N	3.0	2.7	06/12/2016 <i>Morning</i>
O	4.5	5.0	06/12/2016 12:00 AM
P	2.5	2.5	06/12/2016 10:00 AM

No problem was encountered during the transport or at receipt for the 16 collaborators. All the samples were delivered on time and in appropriate conditions. Temperatures during shipment and at receipt were all correct.

### 3.2.3 Result analysis

The raw data are provided in **Appendix 9**.

#### 3.2.3.1 Expert laboratory results

The results obtained by the expert laboratory are given in Table 23.

**Table 23 – Results obtained by the expert Lab.**

Level	Reference method	Alternative method
L0	0/8	0/8
L1	5/8	3/8
L2	8/8	8/8

Fractional recovery was observed at Level 1 for both methods.

#### 3.2.3.2 Results observed by the collaborative laboratories

##### **Aerobic mesophilic flora enumeration**

Depending on the Lab results, the enumeration levels varied from  $1.4 \cdot 10^7$  to  $> 10^8$  CFU/g.

##### **Listeria spp. detection**

16 collaborators participated to the study. The results obtained for the reference method are provided in Table 24; the results obtained for the alternative methods (BACGene *Listeria* Multiplex and BACGene *Listeria* spp.) are given in Table 25.

Table 24 - Positive results by the reference method (ALL the collaborators)

Collaborator	Contamination level		
	L0	L1	L2
A	0	4	8
B	0	4	8
C	0	6	8
D	0	3	7
E	0	6	8
F	0	7	8
G	0	5	8
H	0	5	8
I	0	8	8
J	0	4	8
K	0	5	8
L	0	5	7
M	2	7	8
N	0	7	8
O	0	6	8
P	0	8	8
<b>Total</b>	<b>P<sub>0</sub> = 2</b>	<b>P<sub>1</sub> = 90</b>	<b>P<sub>2</sub> = 126</b>

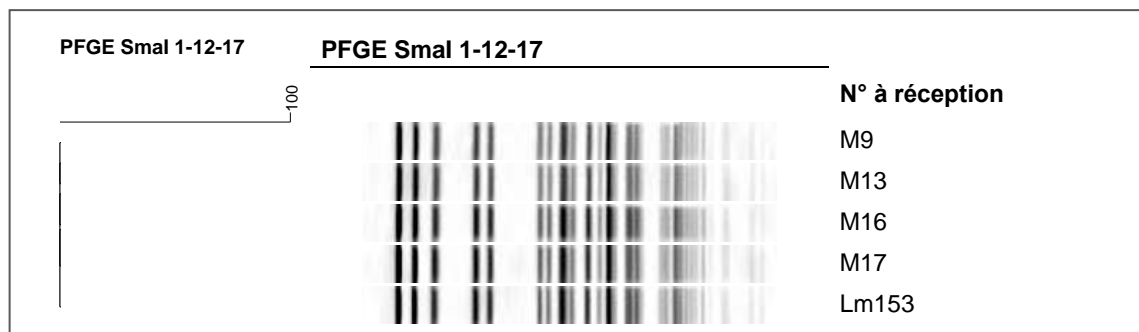
Table 25 - Positive results (before and after confirmation)  
by the alternative methods (ALL the collaborators)

Collaborators	BACGene Listeria Multiplex						BACGene Listeria spp.					
	Contamination level						Contamination level					
	L0		L1		L2		L0		L1		L2	
	Before confirmation	After confirmation	Before confirmation	After confirmation	Before confirmation	After confirmation	Before confirmation	After confirmation	Before confirmation	After confirmation	Before confirmation	After confirmation
A	0	0	3	3	8	8	0	0	3	3	8	8
B	0	0	4	4	7	7	0	0	4	4	7	7
C	0	0	5	5	5	5	0	0	6	6	8	8
D	0	0	6	5	8	8	0	0	5	5	8	8
E	0	0	6	6	8	8	0	0	6	6	8	8
F	0	0	7	7	8	8	0	0	7	7	8	8
G	0	0	6	6	7	7	0	0	6	6	6	6
H	0	0	2	2	8	8	0	0	2	2	8	8
I	0	0	5	5	8	8	0	0	5	5	8	8
J	0	0	5	5	8	8	0	0	5	5	8	8
K	0	0	5	5	8	8	0	0	5	5	8	8
L	0	0	5	5	8	8	0	0	5	5	8	8
M	0	0	5	5	8	8	0	0	5	5	8	8
N	1	0	6	6	8	8	1	0	6	6	8	8
O	1	0	4	4	8	8	1	0	4	4	8	8
P	0	0	4	4	8	8	0	0	4	4	8	8
<b>Total</b>	<b>P<sub>0</sub> = 2</b>	<b>CP<sub>0</sub> = 0</b>	<b>P<sub>1</sub> = 78</b>	<b>CP<sub>1</sub> = 77</b>	<b>P<sub>2</sub> = 123</b>	<b>CP<sub>2</sub> = 123</b>	<b>P<sub>0</sub> = 2</b>	<b>CP<sub>0</sub> = 0</b>	<b>P<sub>1</sub> = 78</b>	<b>CP<sub>1</sub> = 78</b>	<b>P<sub>2</sub> = 125</b>	<b>CP<sub>2</sub> = 125</b>

According to the AFNOR technical rules, it is possible to include the results from a collaborator with maximum one cross contamination at Level 0 for the reference and/or the alternative method. For this study, this rule was applied and results from one collaborator were not kept: Lab M. This Lab obtained two positive results with the reference method on control samples.

It was asked to this Lab (M) to send the plates with typical colonies to ADRIA for the un-spiked samples (M13 - M17) as well as for samples M9 and M16 for which only one plate allowed to recover *Listeria* strains. A fingerprinting using *Sma*I restriction enzyme was run on the strains isolated from the unspiked samples in order to compare their profiles to the profile of the inoculated strain (*Listeria monocytogenes* 153). The following results were observed (See Figure 1).

**Figure 1 - Fingerprinting**



The strains isolated from the 4 samples were clearly the same as the inoculated one.

### 3.2.3.3 Results of the collaborators retained for interpretation

The results obtained with the 15 labs (Lab M excluded) kept for interpretation are presented in Table 26 (reference method) and Table 27 (alternative method).

Table 26 - Positive results by the reference method (Without Lab M)

Collaborator	Contamination level		
	L0	L1	L2
A	0	4	8
B	0	4	8
C	0	6	8
D	0	3	7
E	0	6	8
F	0	7	8
G	0	5	8
H	0	5	8
I	0	8	8
J	0	4	8
K	0	5	8
L	0	5	7
N	0	7	8
O	0	6	8
P	0	8	8
<b>Total</b>	<b>P<sub>0</sub> = 0</b>	<b>P<sub>1</sub> = 83</b>	<b>P<sub>2</sub> = 118</b>

Table 27 - Positive results (before and after confirmation)  
by the alternative method (Without Lab M)

Collaborators	BACGene <i>Listeria</i> Multiplex						BACGene <i>Listeria</i> spp.					
	Contamination level						Contamination level					
	L0		L1		L2		L0		L1		L2	
	Before confirmation	After confirmation	Before confirmation	After confirmation	Before confirmation	After confirmation	Before confirmation	After confirmation	Before confirmation	After confirmation	Before confirmation	After confirmation
A	0	0	3	3	8	8	0	0	3	3	8	8
B	0	0	4	4	7	7	0	0	4	4	7	7
C	0	0	5	5	5	5	0	0	6	6	8	8
D	0	0	6	5	8	8	0	0	5	5	8	8
E	0	0	6	6	8	8	0	0	6	6	8	8
F	0	0	7	7	8	8	0	0	7	7	8	8
G	0	0	6	6	7	7	0	0	6	6	6	6
H	0	0	2	2	8	8	0	0	2	2	8	8
I	0	0	5	5	8	8	1	0	5	5	8	8
J	0	0	5	5	8	8	0	0	5	5	8	8
K	0	0	5	5	8	8	0	0	5	5	8	8
L	0	0	5	5	8	8	0	0	5	5	8	8
N	1	0	6	6	8	8	1	0	6	6	8	8
O	1	0	4	4	8	8	1	0	4	4	8	8
P	0	0	4	4	8	8	0	0	4	4	8	8
<b>Total</b>	<b>P<sub>0</sub> = 2</b>	<b>CP<sub>0</sub> = 0</b>	<b>P<sub>1</sub> = 73</b>	<b>CP<sub>1</sub> = 72</b>	<b>P<sub>2</sub> = 115</b>	<b>CP<sub>2</sub> = 115</b>	<b>P<sub>0</sub> = 2</b>	<b>CP<sub>0</sub> = 0</b>	<b>P<sub>1</sub> = 73</b>	<b>CP<sub>1</sub> = 73</b>	<b>P<sub>2</sub> = 117</b>	<b>CP<sub>2</sub> = 117</b>

### 3.2.4 Calculation and interpretation

#### 3.2.4.1 Calculation of the specificity percentage (SP)

The percentage specificities (SP) of the reference method and of the alternative method, using the data after confirmation, based on the results of level L0 are the following (See Table 28).

**Table 28 - Percentage specificity**

		BACGene <i>Listeria Multiplex</i>	BACGene <i>Listeria spp.</i>
<b>Specificity for the reference method</b>	$SP_{ref} = \left(1 - \left(\frac{P_0}{N_-}\right)\right) \times 100 \% =$	100.0 %	100.0 %
<b>Specificity for the alternative method</b>	$SP_{alt} = \left(1 - \left(\frac{CP_0}{N_-}\right)\right) \times 100 \% =$	100.0 %	100.0 %

N: number of all L0 tests

$P_0$  = total number of false-positive results obtained with the blank samples before confirmation

$CP_0$  = total number of false-positive results obtained with the blank samples

#### 3.2.4.2 Calculation of the sensitivity ( $SE_{alt}$ ), the sensitivity for the reference method ( $SE_{ref}$ ), the relative trueness (RT) and the false positive ratio for the alternative method (FPR)

Fractional positive results were obtained for the low and the high inoculation levels (L1 + L2). The two inoculation levels were retained for calculation.

A summary of the results of the collaborators retained for interpretation with the reference and the alternative methods for both levels is provided in Table 29.

**Table 29 - Summary of the obtained results with the reference method and the alternative method for both levels**

Level	Response	BACGene <i>Listeria</i> Multiplex (target: <i>Listeria</i> spp.)		BACGene <i>Listeria</i> spp.	
		Reference method positive (R+)	Reference method negative (R-)	Reference method positive (R+)	Reference method negative (R-)
1	Alternative method positive (A+)	Positive agreement (A+/R+) <b>PA = 49</b>	Positive deviation (R-/A+) <b>PD = 23</b>	Positive agreement (A+/R+) <b>PA = 50</b>	Positive deviation (R-/A+) <b>PD = 23</b>
	Alternative method negative (A-)	Negative deviation (A-/R+) <b>ND = 34 (PPND = 1)</b>	Negative agreement (A-/R-) <b>NA = 14 (PPNA = 0)</b>	Negative deviation (A-/R+) <b>ND = 33 (PPND = 0)</b>	Negative agreement (A-/R-) <b>NA = 14 (PPNA = 0)</b>
2	Alternative method positive (A+)	Positive agreement (A+/R+) <b>PA = 113</b>	Positive deviation (R-/A+) <b>PD = 2</b>	Positive agreement (A+/R+) <b>PA = 115</b>	Positive deviation (R-/A+) <b>PD = 2</b>
	Alternative method negative (A-)	Negative deviation (A-/R+) <b>ND = 5 (PPND = 0)</b>	Negative agreement (A-/R-) <b>NA = 0 (PPNA = 0)</b>	Negative deviation (A-/R+) <b>ND = 3 (PPND = 0)</b>	Negative agreement (A-/R-) <b>NA = 0 (PPNA = 0)</b>

Based on the data summarized in Table 29, the values of sensitivity of the alternative and reference methods, as well as the relative trueness and false positive ratio for the alternative method taking account the confirmations, are the following (See Table 30).

**Table 30 - Sensitivity, relative trueness and false positive ratio percentages**

	Equation	Level 1		Level 2	
		BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.
Sensitivity for the alternative method:	$SE_{alt} = \frac{(PA+PD)}{(PA+PD+ND)} \times 100\% =$	67.9 %	68.9 %	95.8 %	97.5 %
Sensitivity for the reference method:	$SE_{ref} = \frac{(PA+ND)}{(PA+PD+ND)} \times 100\% =$	78.3 %	78.3 %	98.3 %	98.3 %
Relative trueness	$RT = \frac{(PA+NA)}{N} \times 100\% =$	52.5 %	53.3 %	94.2 %	95.8 %
False positive ratio for the alternative method	$FPR = \frac{FP}{NA} \times 100\% =$	7 %	0.0 %	/	/



### 3.2.4.3 Interpretation of data

The negative deviations are listed in Table 31 for Level 1 and in Table 32 for Level 2.

Among the 40 negative deviations obtained taking into account the two inoculation levels using the BACGene *Listeria* Multiplex kit, the presence of *Listeria* spp. was confirmed for 5 samples (C20, C15, C19, C22 and G6). The two collaborators involved in these results run again PCR tests on the DNA extracts in triplicate and obtained then positive results.

Note that for all these samples (except sample No G6), positive PCR results were obtained with the BACGene *Listeria* spp. kit for the first PCR run.

The positive deviations are listed in Table 33 for Level 1 and in Table 34 for Level 2. The same results were observed with both kits.

For Lab C, we might suspect a pipetting error: 4 negative deviations linked to this Lab.

Table 31 - Negative deviations for Level 1 with the two kits

Collaborator	Sample N°	BACGene Listeria spp.						
		BACGene Listeria Multiplex	BACGene Listeria spp.	Confirmation	Final result BACGene Listeria Multiplex	Agreement BACGene Listeria Multiplex	Final result BACGene Listeria spp.	Agreement BACGene Listeria spp.
		Ct	Ct	O&A				
A	A4	-	-	-	-	ND	-	ND
	A7	-	-	-	-	ND	-	ND
	A20	-	-	-	-	ND	-	ND
	A23	-	-	-	-	ND	-	ND
B	B1	-	-	-	-	ND	-	ND
	B11	-	-	-	-	ND	-	ND
C	C20	-/(+(26.76)/ +(26.76)/ +(25.91)	+(23.85)	+	-	ND	+	PA
	C23	-	-	-	-	ND	-	ND
D	D16	-	-	-	-	ND	-	ND
E	E16	-	-	-	-	ND	-	ND
	E23	-	-	-	-	ND	-	ND
F	F20	-	-	-	-	ND	-	ND
H	H7	-	-	-	-	ND	-	ND
	H11	-	-	-	-	ND	-	ND
	H16	-	-	-	-	ND	-	ND
	H23	-	-	-	-	ND	-	ND
I	I1	-	-	-	-	ND	-	ND
	I4	-	-	-	-	ND	-	ND
	I16	-	-	-	-	ND	-	ND
J	J16	-	-	-	-	ND	-	ND
K	K16	-	-	-	-	ND	-	ND
L	L4	-	-	-	-	ND	-	ND
	L7	-	-	-	-	ND	-	ND
	L23	-	-	-	-	ND	-	ND
N	N1	-	-	-	-	ND	-	ND
	N9	-	-	-	-	ND	-	ND
O	O1	-	-	-	-	ND	-	ND
	O7	-	-	-	-	ND	-	ND
	O9	-	-	-	-	ND	-	ND
	O23	-	-	-	-	ND	-	ND
P	P1	-	-	-	-	ND	-	ND
	P4	-	-	-	-	ND	-	ND
	P9	-	-	-	-	ND	-	ND
	P20	-	-	-	-	ND	-	ND

Table 32 - Negative deviations for Level 2 with the two kits

Collaborator	Sample N°	BACGene <i>Listeria</i> spp.						
		BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
		Ct	Ct	O&A				
B	B15	-	-	-	-	ND	-	ND
C	C15	-/(33.72)/ +(32.97)/ +(33.17)	+(32.45)	+	-	ND	+	PA
	C19	-/(20.75)/ +(20.99)/ +(21.25)	+(19.25)	+	-	ND	+	PA
	C22	-/(20.13)/ +(20.28)/ +(20.53)	+(18.81)	+	-	ND	+	PA
G	G2	-	-	-	-	ND	-	ND
	G6	+(22.45)	-/(26.96)/ +(27.09)/ +(26.70)	+	+	PA	-	ND

Table 33 - Positive deviations for Level 1 with the two kits

Collaborator	Sample N°	BACGene <i>Listeria</i> spp.						
		BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
		Ct	Ct	O&A				
A	A1	+(27.20)	+(27.02)	+	+	PD	+	PD
	A9	+(24.24)	+(24.22)	+	+	PD	+	PD
	A11	+(24.14)	+(24.07)	+	+	PD	+	PD
B	B7	+(27.75)	+(26.01)	+	+	PD	+	PD
	B16	+(24.35)	+(23.69)	+	+	PD	+	PD
C	C9	+(20.91)	+(17.92)	+	+	PD	+	PD
D	D1	+(30.96)	+(32.62)	+	+	PD	+	PD
	D7	+(28.94)	+(30.60)	+	+	PD	+	PD
	D20	+(35.01)	+(37.85)	+	+	PD	+	PD
E	E1	+(28.92)	+(29.09)	+	+	PD	+	PD
	E9	+(27.09)	+(27.41)	+	+	PD	+	PD
F	F11	+(26.6)	+(26.6)	+	+	PD	+	PD
G	G23	+(28.90)	+(31.41)	+	+	PD	+	PD
H	H1	+(25.57)	+(23.90)	+	+	PD	+	PD
J	J7	+(26.90)	+(26.63)	+	+	PD	+	PD
	J11	+(21.97)	+(22.05)	+	+	PD	+	PD
K	K11	+(26.12)	+(26.43)	+	+	PD	+	PD
L	L1	+(29.86)	+(30.57)	+	+	PD	+	PD
	L9	+(34.68)	+(35.00)	+	+	PD	+	PD
	L16	+(23.24)	+(23.01)	+	+	PD	+	PD
N	N11	+(27.18)	+(27.63)	+	+	PD	+	PD
O	O4	+(24.41)	+(24.22)	+	+	PD	+	PD
	O11	+(24.82)	+(25.00)	+	+	PD	+	PD

**Table 34 - Positive deviations for Level 2 with the two kits**

Collaborator	Sample N°	BACGene <i>Listeria</i> spp.						
		BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
		Ct	Ct	O&A				
D	D15	+(37.40)	+(41.05)	- (+ after subculture in Fraser)	+	PD	+	PD
L	L15	+(25.38)	+(25.06)	+	+	PD	+	PD

For an **unpaired study design**, the difference between (ND – PD) is calculated for the level(s) where fractional recovery is obtained (so  $L_1$  and possibly  $L_2$ ). The observed value found for (ND – PD) shall not be higher than the AL. The AL is defined as  $[(ND - PD)_{max}]$  and calculated per level where fractional recovery is obtained as described below using the following three parameters:

$$(p+)_{ref} = \frac{P_x}{N_x}$$

where

$P_x$  = number of samples with a positive result obtained with the reference method at level  $x$  ( $L_1$  or  $L_2$ ) for all the collaborators

$N_x$  = number of samples tested at level  $x$  ( $L_1$  or  $L_2$ ) with the reference method by all laboratories.

$$(p+)_{alt} = \frac{CP_x}{N_x}$$

where

$CP_x$  = number of samples with a confirmed positive result obtained with the alternative method at level  $x$  ( $L_1$  or  $L_2$ ) for all the collaborators;

$N_x$  = number of samples tested at level  $x$  ( $L_1$  or  $L_2$ ) with the alternative method by all the collaborators.

$$(ND-PD)_{max} = \sqrt{3N_x \times \left( (p+)_{ref} + (p+)_{alt} - 2((p+)_{ref} \times (p+)_{alt}) \right)}$$

where

$N_x$  = the total number of samples tested for level  $x$  ( $L_1$  or  $L_2$ ) with the reference method by all the collaborators.

The AL is not met when the observed value is higher than the AL. When the AL is not met, investigations should be made (e.g. root cause analysis) in order to provide an explanation of the observed results. Based on the AL and the additional information, it is decided whether the alternative method is regarded as not fit for purpose. The reasons for acceptance of the alternative method when the AL is not met shall be stated in the study report.

In this study, fractional recovery was observed at Level 1 and Level 2. The calculations are the following, according to the EN ISO 16140-2:2016 (See Table 35).

**Table 35 - Calculations**

	Level 1		Level 2	
	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.
$N_x$	120	120	120	120
$(\rho^+)_{ref}$	0.7	0.7	1.0	1.0
$(\rho^+)_{alt}$	0.6	0.6	1.0	1.0
AL = (ND - PD) max	12.89	12.85	4.53	3.83
ND - PD	11	10	3	1
Conclusion	ND - PD < AL	ND - PD < AL	ND - PD < AL	ND - PD < AL

The ISO 16140-2 (2016) requirements are fulfilled as (ND - PD) is lower than the AL.

#### 3.2.4.4 Evaluation of the LOD<sub>50%</sub>, LOD<sub>95%</sub> and RLOD between laboratories

The RLOD was calculated using the EN ISO 16140-2:2016 Excel spreadsheet available at [https://standards.iso.org/iso/16140/-5/ed-1/en/RLOD\\_inter-lab-study\\_16140-2\\_AnnexF\\_ver1\\_28-06-2017.xls](https://standards.iso.org/iso/16140/-5/ed-1/en/RLOD_inter-lab-study_16140-2_AnnexF_ver1_28-06-2017.xls). The results are used only for information (see Tables 36 and 37).

**Table 36 - LOD<sub>50%</sub>, LOD<sub>95%</sub> and RLOD  
BACGene Multiplex**

Method	LOD 50%	LOD 95%	RLOD
Reference	0,56 [0,46;0,68]	2,41 [1,97;2,95]	1,32
Alternative	0,73 [0,61;0,89]	3,17 [2,62;3,84]	[1,05;1,65]

**Table 37 - LOD<sub>50%</sub>, LOD<sub>95%</sub> and RLOD  
BACGene *Listeria* spp**

Method	LOD 50%	LOD 95%	RLOD
Reference	0,56 [0,46;0,68]	2,41 [1,97;2,95]	1,21
Alternative	0,68 [0,56;0,82]	2,92 [2,41;3,55]	[0,96;1,53]

## 4 EXTENSION STUDY (2023) FOR THE USE OF THE BACGro ULTRA LISTERIA BROTH (BULB)

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### 4.1 Sensitivity study

*The sensitivity (SE) is the ability of the method to detect the analyte by either the reference or alternative method.*

#### 4.1.1 Protocol applied during the validation study

##### > **Incubation times**

During the validation study, the minimum incubation time was applied: 18 h at 37°C ± 1°C in pre-warmed (37°C ± 1°C) **BACGro ULTRA Listeria Broth**.

##### > **Thermocyclers**

For this extension study, two cyclers were tested:

- The CFX96 Touch™ (standard) from Bio-Rad,
- The AriaMx™ from Agilent.

##### > **PCR interpretation**

PCR results were interpreted using the Evaluation sheet version 2.

##### > **Confirmation protocols**

- Streaking 10 µL of the enrichment broth onto O&A and Palcam plates.
- Confirmation of the typical colonies from O&A plates on first choice using the tests described in the reference method (gram, catalase) and using biochemical gallery for identification of the strain (required for the validation study).

During the validation, all the negative results were confirmed by proceeding to a subculture in Fraser broth incubated for 24 h at 37°C, prior to streaking onto O&A and Palcam plates in order to have the total duration of incubation of the reference method (Half Fraser: 24-26 h at 30°C + Fraser: 24 h ± 2 h at 37°C).

##### > **BACGro ULTRA Listeria Broth storage for 72h at 5°C ±3°C**

The enriched samples were stored for 72h at 5°C ±3°C and tested again (PCR and confirmation).

#### 4.1.2 Number and nature of samples

432 samples were analysed providing 244 (CFX96) or 245 (AriaMx™) positive and 188 (CFX96) or 187 (AriaMx™) negative results. The distribution per tested category and type is given in Table 38.

**Table 38 – Distribution per tested category and type**

Category		Type		CFX96 Touch™ (standard)			AriaMx™		
				Positive	Negative	Total	Positive	Negative	Total
1	Composite foods / Ready-to-eat and ready-to-reheat	a	Ready-to-eat	13	11	24	13	11	24
		b	Ready-to-reheat	12	9	21	12	9	21
		c	Confectionaries, pastries and egg products	15	10	25	15	10	25
		Total		40	30	70	40	30	70
2	Meat products	a	Raw products (frozen or fresh)	18	9	27	18	9	27
		b	Meat based products ready to reheat	10	11	21	10	11	21
		c	Raw and cooked delicatessen	15	10	25	15	10	25
		Total		43	30	73	43	30	73
3	Milk & dairy products	a	Raw milk cheeses	15	11	26	15	11	26
		b	Other products based on raw milk	10	11	21	10	11	21
		c	Heat treated products	17	9	26	17	9	26
		Total		42	31	73	42	31	73
4	Vegetables	a	Raw products (fresh and frozen)	16	12	28	16	12	28
		b	Pre-cooked vegetables, vegetables under modified atmosphere	13	15	28	13	15	28
		c	Ready-to-eat	16	7	23	16	7	23
		Total		45	34	79	45	34	79
5	Seafood and fishery products	a	Raw products (fresh and frozen)	10	10	20	10	10	20
		b	Cured & smoked	14	11	25	14	11	25
		c	Ready-to-eat, Ready to reheat	15	9	24	15	9	24
		Total		39	30	69	39	30	69
6	Production environmental samples	a	Dusts and residues	12	8	20	12	8	20
		b	Cleaning and process waters	10	11	21	10	11	21
		c	Surface samples	13	14	27	14	13	27
		Total		35	33	68	36	32	68
<b>All categories</b>				<b>244</b>	<b>188</b>	<b>432</b>	<b>245</b>	<b>187</b>	<b>432</b>

The distribution per target analytes is given in Tables 39 (CFX96) and 40 (AriaMx™).

**Table 39 – Distribution per target analytes - CFX96 Touch™ (standard)**

Category	<i>Listeria spp</i> (A)		<i>Listeria spp</i> + <i>Listeria monocytogenes</i> (B)		Total (A+B)		<i>Listeria monocytogenes</i> (C)		Total positive samples
	Number of samples	%	Number of samples	%	Number of samples	%	Number of samples	%	
1	8	20,0%	7	17,5%	15	37,5%	25	62,5%	40
2	9	20,9%	17	39,5%	26	60,5%	17	39,5%	43
3	10	23,8%	7	16,7%	17	40,5%	25	59,5%	42
4	11	24,4%	7	15,6%	18	40,0%	27	60,0%	45
5	10	25,6%	14	35,9%	24	61,5%	15	38,5%	39
6	8	22,9%	8	22,9%	16	45,7%	19	54,3%	35
<b>Total</b>	<b>56</b>	<b>23,0%</b>	<b>60</b>	<b>24,6%</b>	<b>116</b>	<b>47,5%</b>	<b>128</b>	<b>52,5%</b>	<b>244</b>

**Table 40 – Distribution per target analytes - AriaMx™**

Category	<i>Listeria spp</i> (A)		<i>Listeria spp</i> + <i>Listeria monocytogenes</i> (B)		Total (A+B)		<i>Listeria monocytogenes</i> (C)		Total positive samples
	Number of samples	%	Number of samples	%	Number of samples	%	Number of samples	%	
1	8	20,0%	7	17,5%	15	37,5%	25	62,5%	40
2	9	20,9%	17	39,5%	26	60,5%	17	39,5%	43
3	10	23,8%	7	16,7%	17	40,5%	25	59,5%	42
4	11	24,4%	7	15,6%	18	40,0%	27	60,0%	45
5	10	25,6%	14	35,9%	24	61,5%	15	38,5%	39
6	8	22,2%	8	22,2%	16	44,4%	20	55,6%	36
<b>Total</b>	<b>56</b>	<b>22,9%</b>	<b>60</b>	<b>24,5%</b>	<b>116</b>	<b>47,3%</b>	<b>129</b>	<b>52,7%</b>	<b>245</b>

According to the AFNOR technical rules, the number of samples contaminated with *Listeria spp.* alone (different from *Listeria monocytogenes* specie) or mixed with *Listeria monocytogenes* per category must be comprised between 15 and 25 minimum samples; it is the case for all the categories.

#### 4.1.3 Artificial contamination of samples

Naturally contaminated products were preferentially analysed, but artificial contaminations were also carried out using the seeding protocol by direct inoculations of products using a liquid inoculum, followed by storage for 48-72 h at 3°C ± 2°C. The artificial contaminations are presented in **Appendix 10**.

154 samples were artificially contaminated, using 54 different strains. 124 (CFX96) and 125 (AriaMx) gave a positive result. 49.6% (CFX96) and 49.8% (AriaMx) of samples were inoculated at level ≤ 3 CFU and 1.2% (CFX96 and AriaMx) were inoculated between 3 and 10 CFU.



Two samples (n°2398 and 2400, wastes of meat products) were artificially contaminated with *L. monocytogenes* Ad2856 strain but gave *L. welshimeri* positive results. These two samples were considered as naturally contaminated samples.

The repartition of the positive samples per inoculation protocol and inoculation level is given in Table 41.

**Table 41 – Repartition of the positive samples per inoculation protocol and inoculation level**

Thermocycler	Naturally contaminated	Artificial contamination		Total
		Seeding protocol		
		≤ 3 CFU	3 < x ≤ 10 CFU	
CFX96	120	121	3	<b>244</b>
	49,2%	49,6%	1,2%	100,0%
AriaMx™	120	122	3	<b>245</b>
	49,0%	49,8%	1,2%	100,0%

**49.2% (CFX96) and 49.0% (AriaMx) of the samples were naturally contaminated.**

#### 4.1.4 Test results

Raw data per category are given in **Appendix 11**. The results are given in Tables 42 and 43.

**Table 42 – Interpretation of sample results between the reference and alternative method (based on the confirmed alternative method results) - CFX96 Touch™ (standard)**

Category		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Composite foods / Ready-to-eat and ready-to-reheat	25	26	7	8	0	4	<b>70</b>
2	Meat products	27	28	10	6	0	2	<b>73</b>
3	Milk & dairy products	26	29	7	9	0	2	<b>73</b>
4	Vegetables	28	33	10	7	0	1	<b>79</b>
5	Seafood and fishery products	24	30	11	4	0	0	<b>69</b>
6	Production environmental samples	21	33	6	8	0	0	<b>68</b>
<b>TOTAL</b>		<b>151</b>	<b>179</b>	<b>51</b>	<b>42</b>	<b>0</b>	<b>9</b>	<b>432</b>

**Table 43 – Interpretation of sample results between the reference and alternative method (based on the confirmed alternative method results) -**

**AriaMx™**

Category		PA	NA*	PD	ND**	PPND	PPNA	Total
1	Composite foods / Ready-to-eat and ready-to-reheat	25	26	7	8	0	4	70
2	Meat products	28	30	10	5	0	0	73
3	Milk & dairy products	26	28	7	9	0	3	73
4	Vegetables	29	32	10	6	0	2	79
5	Seafood and fishery products	24	30	11	4	0	0	69
6	Production environmental samples	21	32	7	8	0	0	68
<b>TOTAL</b>		<b>153</b>	<b>178</b>	<b>52</b>	<b>40</b>	<b>0</b>	<b>9</b>	<b>432</b>

\* PPNA not included

\*\* PPND not included

#### 4.1.5 Calculation of relative trueness (RT), sensitivity (SE) and false positive ratio (FPR)

The calculations are presented in Tables 44 and 45.

**Table 44 – Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) - CFX96 Touch™ (standard)**

Category		Type	PA	NA*	PD	ND**	PPND	PPNA	SE alt %	SE ref %	RT %	FPR %
1	Composite foods / Ready-to-eat and ready-to-reheat	a Ready-to-eat	10	9	2	1	0	2	92,3	84,6	87,5	18,2
		b Ready-to-reheat	4	9	2	6	0	0	50,0	83,3	61,9	0,0
		c Confectionaries, pastries and egg products	11	8	3	1	0	2	93,3	80,0	84,0	20,0
		Total	25	26	7	8	0	4	80,0	82,5	78,6	13,3
2	Meat products	a Raw products (frozen or fresh)	12	9	4	2	0	0	88,9	77,8	77,8	0,0
		b Meat based products ready to reheat	4	10	3	3	0	1	70,0	70,0	71,4	9,1
		c Raw and cooked delicatessen	11	9	3	1	0	1	93,3	80,0	84,0	10,0
		Total	27	28	10	6	0	2	86,0	76,7	78,1	6,7
3	Milk & dairy products	a Raw milk cheeses	9	9	3	3	0	2	80,0	80,0	76,9	18,2
		b Other products based on raw milk	6	11	1	3	0	0	70,0	90,0	81,0	0,0
		c Heat treated products	11	9	3	3	0	0	82,4	82,4	76,9	0,0
		Total	26	29	7	9	0	2	78,6	83,3	78,1	6,5
4	Vegetables	a Raw products (fresh and frozen)	11	11	3	2	0	1	87,5	81,3	82,1	8,3
		b Pre-cooked vegetables, vegetables under modified atmosphere	6	15	3	4	0	0	69,2	76,9	75,0	0,0
		c Ready-to-eat	11	7	4	1	0	0	93,8	75,0	78,3	0,0
		Total	28	33	10	7	0	1	84,4	77,8	78,5	2,9
5	Seafood and fishery products	a Raw products (fresh and frozen)	7	10	2	1	0	0	90,0	80,0	85,0	0,0
		b Cured & smoked	9	11	2	3	0	0	78,6	85,7	80,0	0,0
		c Ready-to-eat, Ready to reheat	8	9	7	0	0	0	100,0	53,3	70,8	0,0
		Total	24	30	11	4	0	0	89,7	71,8	78,3	0,0
6	Production environmental samples	a Dusts and residues	8	8	1	3	0	0	75,0	91,7	80,0	0,0
		b Cleaning and process waters	6	11	2	2	0	0	80,0	80,0	81,0	0,0
		c Surface samples	7	14	3	3	0	0	76,9	76,9	77,8	0,0
		Total	21	33	6	8	0	0	77,1	82,9	79,4	0,0
<b>All categories</b>			<b>151</b>	<b>179</b>	<b>51</b>	<b>42</b>	<b>0</b>	<b>9</b>	<b>82,8</b>	<b>79,1</b>	<b>78,5</b>	<b>4,8</b>

\* PPNA not included

\*\* PPND not included

**Table 45 – Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) - AriaMx™**

Category		Type	PA	NA	PD	ND	PPND	PPNA	SE alt %	SE ref %	RT %	FPR %
1	Composite foods / Ready-to-eat and ready-to-reheat	a Ready-to-eat	10	8	2	1	0	3	92,3	84,6	87,5	27,3
		b Ready-to-reheat	4	9	2	6	0	0	50,0	83,3	61,9	0,0
		c Confectionaries, pastries and egg products	11	9	3	1	0	1	93,3	80,0	84,0	10,0
		Total	25	26	7	8	0	4	80,0	82,5	78,6	13,3
2	Meat products	a Raw products (frozen or fresh)	13	9	4	1	0	0	94,4	77,8	81,5	0,0
		b Meat based products ready to reheat	4	11	3	3	0	0	70,0	70,0	71,4	0,0
		c Raw and cooked delicatessen	11	10	3	1	0	0	93,3	80,0	84,0	0,0
		Total	28	30	10	5	0	0	88,4	76,7	79,5	0,0
3	Milk & dairy products	a Raw milk cheeses	9	9	3	3	0	2	80,0	80,0	76,9	18,2
		b Other products based on raw milk	6	11	1	3	0	0	70,0	90,0	81,0	0,0
		c Heat treated products	11	8	3	3	0	1	82,4	82,4	76,9	11,1
		Total	26	28	7	9	0	3	78,6	83,3	78,1	9,7
4	Vegetables	a Raw products (fresh and frozen)	11	11	3	2	0	1	87,5	81,3	82,1	8,3
		b Pre-cooked vegetables, vegetables under modified atmosphere	7	14	3	3	0	1	76,9	76,9	78,6	6,7
		c Ready-to-eat	11	7	4	1	0	0	93,8	75,0	78,3	14,3
		Total	29	32	10	6	0	2	86,7	77,8	79,7	5,9
5	Seafood and fishery products	a Raw products (fresh and frozen)	7	10	2	1	0	0	90,0	80,0	85,0	0,0
		b Cured & smoked	9	11	2	3	0	0	78,6	85,7	80,0	0,0
		c Ready-to-eat, Ready to reheat	8	9	7	0	0	0	100,0	53,3	70,8	0,0
		Total	24	30	11	4	0	0	89,7	71,8	78,3	0,0
6	Production environmental samples	a Dusts and residues	8	8	1	3	0	0	75,0	91,7	80,0	0,0
		b Cleaning and process waters	6	11	2	2	0	0	80,0	80,0	81,0	0,0
		c Surface samples	7	13	4	3	0	0	78,6	71,4	74,1	0,0
		Total	21	32	7	8	0	0	77,8	80,6	77,9	0,0
<b>All categories</b>			<b>153</b>	<b>178</b>	<b>52</b>	<b>40</b>	<b>0</b>	<b>9</b>	<b>83,7</b>	<b>78,8</b>	<b>78,7</b>	<b>4,8</b>

\* PPNA not included

\*\* PPND not included

A summary of the results is given in Table 46.

**Table 46 – Summary of results**

		CFX96 Touch™ (standard)	AriaMx™
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA + PD)}{(PA + ND + PD)} \times 100\%$	82.8 %	83.7 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA + ND)}{(PA + ND + PD)} \times 100\%$	79.1%	78.8 %
Relative trueness	$RT = \frac{(PA + NA)}{N} \times 100\%$	78.5 %	78.7 %
False positive ratio for the alternative method* FP = PPNA + PPND	$FPR = \frac{(FP)}{NA} \times 100\%$	4.8 %	4,8 %

With  $ND = ND + PPND$   
 $NA = NA + PPNA$

#### 4.1.6 Analysis of discordant results

##### > Negative deviations

The negative deviations are given in Table 47.

42 (CFX96) and 40 (AriaMx) negative deviations were observed for the overall categories. 25 samples were artificially contaminated and 17 were naturally contaminated.

For four samples (n°295, 576, 2170 and 2171), the confirmatory tests concluded to the presence of *Listeria* spp. in the BACGro ULTRA Listeria Broth: two samples after direct streaking (n°295, 2170) and two samples after a subculture in Fraser broth (n°576 and 2171). Among these four samples, two samples gave positive result with the AriaMx thermocycler (n°295 and 576).

The DNA extract of these four samples was tested twice again; all the tests gave negative result except for sample n°576 with the CFX96 which gave positive results twice with high Cq value (Cq=40,70 and 40,52). The late Cq values obtained show that the contamination level was just at the limit of detection of the method. This explains the fact that in some conditions, positive results were observed while negative results were obtained in the other conditions.

For all other samples, the confirmatory tests did not allow to recover *Listeria* spp. strains in the enriched broths.

In addition, for 7 samples in negative agreement, the presence of *Listeria* spp. was confirmed in the enrichment broth; they are listed in Table 48. Among those, for two NA samples (n°285 and 336) the *Listeria* spp. strain were recovered only after the subculture in Fraser broth required by the ISO 16140-2 (2016).

> **Positive deviations**

The positive deviations are given in Table 49.

51 (CFX96) and 52 (AriaMx) positive deviations were observed. 25 samples were artificially contaminated and 27 were naturally contaminated.

It was possible to recover the *Listeria* spp. strain only after a subculture in Fraser broth for two samples (n°1175, 1377). For sample n°428, two strains were recovered: *L. innocua* from the direct streaking and *L. monocytogenes* only after a subculture in Fraser broth.

Table 47 – Negative deviations

N° sample	Product	Artificial contamination		Reference method: ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp								Agreement		Category	Type		
		Strain	Inoculation level/sample (mean)		PCR result				Confirmation								Final result	
					CFX96		AriaMx		Direct streaking		After Subculture in Fraser	All confirmatory tests	CFX96	AriaMx				
					Cq	Result	Cq	Result	O&A	Palcam								
1874	Sandwich with ham, butter, wholemeal bread	<i>L. monocytogenes</i> Ad1492 <i>L. welshimeri</i> Ad3207	0,4 0,8	<i>L. monocytogenes</i> / <i>L. welshimeri</i>	No Cq	-	No Cq	-	st	-	-	-	-	-	ND	ND	1	a
325	RTRH food with vegetables	/	/	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	1	b
580	RTRH food with vegetables and cheese	/	/	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	1	b
1342	RTRH food with potatoes, thyme, rye	/	/	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	st	-	-	-	-	-	ND	ND	1	b
1481	Zucchini cake with cheese	/	/	<i>L. seeligeri</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	1	b
1916	Pizza, 4 cheeses	<i>L. monocytogenes</i> Ad1678 <i>L. innocua</i> Ad1676	0,6 0,2	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	1	b
1919	Couscous	<i>L. monocytogenes</i> Ad1678 <i>L. innocua</i> Ad1676	0,6 0,2	<i>L. innocua</i>	No Cq	-	No Cq	-	st	st	-	-	-	-	ND	ND	1	b
2251	Pastry, with cream flavour coffee	<i>L. monocytogenes</i> Ad1195	3,2	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	1	c
282	Raw red meat	/	/	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	st	st	-	-	-	-	ND	ND	2	a
295	Raw poultry meat	/	/	<i>L. innocua</i>	No Cq/ No Cq/ No Cq	-/-/-	37,01/ 33,75/ 35,87	+/+ /+	+d/H- ( <i>L. innocua</i> )	-	/	+	-	+	ND	PA	2	a
278	Roasted chicken wings	/	/	<i>L. innocua</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	2	b
1907	Cooked rabbit meat	<i>L. monocytogenes</i> Ad265	1,2	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	st	st	-	-	-	-	ND	ND	2	b
1908	Cooked chicken meat	<i>L. monocytogenes</i> Ad265	1,2	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	st	st	-	-	-	-	ND	ND	2	b
1191	Smoked chorizo	/	/	<i>L. welshimeri</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	2	c
2161	Raw goat milk cheese	<i>L. monocytogenes</i> Ad1205 <i>L. seeligeri</i> Ad1783	1,2 1,2	<i>L. monocytogenes</i> / <i>L. seeligeri</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	3	a
2163	Raw cow milk cheese	<i>L. monocytogenes</i> Ad1205 <i>L. seeligeri</i> Ad1783	1,2 1,2	<i>L. seeligeri</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	3	a
2390	Raw ewe milk cheese	<i>L. monocytogenes</i> Ad250	2,0	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	st	-	-	-	-	-	ND	ND	3	a
2166	Raw milk cheese	<i>L. ivanovii</i> Ad679	0,6	<i>L. ivanovii</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	3	b
2170	Cream with raw cow milk	<i>L. ivanovii</i> Ad679	0,6	<i>L. ivanovii</i>	No Cq/ No Cq/ No Cq	-/-/-	No Cq/ No Cq/ No Cq	-/-/-	H-d (1) ( <i>L. ivanovii</i> )	-	/	+	-	-	ND	ND	3	b
2171	Cream with raw cow milk	<i>L. monocytogenes</i> Ad1785	3,0	<i>L. monocytogenes</i>	No Cq/ No Cq/ No Cq	-/-/-	No Cq/ No Cq/ No Cq	-/-/-	-	-	H+ ( <i>L. mono</i> )	+	-	-	ND	ND	3	b
937	Pasteurized fresh cream (light)	<i>L. monocytogenes</i> Ad2858	1,8	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	st	-	-	-	-	-	ND	ND	3	c
1911	Pasteurised cream, thick	<i>L. monocytogenes</i> Ad3119 <i>L. seeligeri</i> Ad3275	0,4 0,0	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	3	c
1914	Panna cotta with caramel	<i>L. monocytogenes</i> Ad3119 <i>L. seeligeri</i> Ad3275	0,4 0,0	<i>L. seeligeri</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	3	c
343	Broccoli	/	/	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	st	-	-	-	-	-	ND	ND	4	a
1378	Cabbage	<i>L. monocytogenes</i> Ad3268	4,2	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	4	a
576	Grilled eggplant	/	/	<i>L. monocytogenes</i>	No Cq/ 40,70/ 40,52	-/+ /+	34,39/ 36,18/ 35,47	+ /+ /+	-	-	H+ ( <i>L. mono</i> )	+	-	+	ND	PA	4	b

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.

N° sample	Product	Artificial contamination		Reference method: ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp								Final result		Agreement		Category	Type
		Strain	Inoculation level/sample (mean)		PCR result		Confirmation											
					CFX96		AriaMx		Direct streaking		After Subculture in Fraser	All confirmatory tests						
					Cq	Result	Cq	Result	O&A	Palcam			CFX96	AriaMx	CFX96	AriaMx		
585	Vegetables mix (with tomato and basil)	/	/	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	st	-	-	-	-	-	ND	ND	4	b
1033	Vegetables cake (leeks, carrots, broccoli)	/	/	<i>L. monocytogenes</i> / <i>L. innocua</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	4	b
1388	<b>Vegetable macedoine</b>	<i>L. monocytogenes</i> Ad2598	3,0	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	4	b
1391	<b>Tapenade of black olives</b>	<i>L. welshimeri</i> Ad1668	2,6	<i>L. welshimeri</i>	No Cq	-	No Cq	-	st	st	-	-	-	-	ND	ND	4	c
591	Raw salmon pulp	/	/	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	st	-	-	-	-	ND	ND	5	a
443	Smoked salmon filet	/	/	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	5	b
1044	Smoked salmon filet (Scottish)	/	/	<i>L. welshimeri</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	5	b
1862	Smoked herring	/	/	<i>L. seeligeri</i>	No Cq	-	No Cq	-	st	st	-	-	-	-	ND	ND	5	b
1904	<b>Waste, RTRH food pancake (RTRH food industry)</b>	<i>L. monocytogenes</i> Ad1179 <i>L. welshimeri</i> Ad1175	0,4 0,6	<i>L. welshimeri</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	6	a
2398	<b>Waste, meat product (production of ham)</b>	<i>L. monocytogenes</i> Ad2856	0	<i>L. welshimeri</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	6	a
2400	<b>Waste, meat product (production of ham)</b>	<i>L. monocytogenes</i> Ad2856	0	<i>L. welshimeri</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	6	a
1327	Process water, cooling tank (meat products industry, poultry)	/	/	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	6	b
2815	<b>Rinse water, blender, zone 1 (production of sardines)</b>	<i>L. monocytogenes</i> Ad2600	1,0	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	st	st	-	-	-	-	ND	ND	6	b
2403	<b>Wipe, before cleaning, hall (production of sausage)</b>	<i>L. monocytogenes</i> Ad2453 <i>L. innocua</i> Ad1207	0,2 0,6	<i>L. monocytogenes</i> / <i>L. innocua</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	6	c
2404	<b>Wipe, before cleaning, cutter (production of sausage)</b>	<i>L. monocytogenes</i> Ad549	1,0	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	-	-	-	-	-	-	ND	ND	6	c
2819	<b>Swab, mixer (production of pork pâté)</b>	<i>L. monocytogenes</i> Ad2503	1,2	<i>L. monocytogenes</i>	No Cq	-	No Cq	-	st	st	-	-	-	-	ND	ND	6	c



Table 48 - Confirmed NA samples

N° Sample	Product	BACGene <i>Listeria</i> spp. - PCR result				Confirmation					Final result		Agreement		Category	Type
		CFX96 Touch™ (standard)		Aria MX		Direct streaking			Negative samples (Subculture in Fraser)	All confirmatory tests	CFX96 Touch™ (standard)	Aria Mx	CFX96 Touch™ (standard)	Aria Mx		
		<i>Listeria</i> spp. (Cq)	Result	<i>Listeria</i> spp. (Cq)	Result	O&A (10 µL)	Palcam (10 µL)	Identification								
336	Soya galette with tomatoes and aromatic herbs	No Cq/No Cq/No Cq	-/-	No Cq/No Cq/No Cq	-/-	-	-	/	H- ( <i>L. innocua</i> )	+	-	-	NA	NA	1	b
1675	RTRH food with ham and cheese	No Cq/41,32/No Cq	-/+	No Cq/No Cq/No Cq	-/-	H+(2)	-	<i>L. monocytogenes</i>	/	+	-	-	NA	NA	1	b
285	Raw rooster meat	No Cq/No Cq/No Cq	-/-	No Cq/No Cq/No Cq	-/-	-	-(2)	/	H+ ( <i>L. mono</i> )	+	-	-	NA	NA	2	a
2167	Raw milk cheese	No Cq/No Cq/No Cq	-/-	No Cq/No Cq/No Cq	-/-	H+ni/H+	-	<i>L. ivanovii</i>	H+ ( <i>L. ivanovii</i> )	+	-	-	NA	NA	3	b
2397	Raw cream with raw cow milk	No Cq/No Cq/No Cq	-/-	No Cq/35,39/25,47	-/+	H+(7)	-	<i>L. monocytogenes</i>	/	+	-	-	NA	NA	3	b
2260	Rinse water (production of pork meat product)	No Cq/No Cq/No Cq	-/-	No Cq/No Cq/No Cq	-/-	H+(1)	-(1)	<i>L. monocytogenes</i>	/	+	-	-	NA	NA	6	b
1888	Wipe, after cleaning (RTRH food industry)	No Cq/37,97/No Cq	-/+	31,34	+	H+	+	<i>L. monocytogenes</i>	/	+	-	+	NA	PD	6	c

Table 49 – Positive deviations

N° Sample	Product	Artificial contamination		Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp										Agreement		Category	Type		
		Strain	Inoculation level/sample (mean)	<i>Listeria</i> spp. final result	PCR result				Confirmation				Final result							
					CFX96		AriaMx		Direct streaking			After subculture in Fraser	All confirmatory tests	CFX96	AriaMx					
					Cq	Result	Cq	Result	O&A	Palcam	Identification									
2153	RTE pepper with cheese	<i>L. monocytogenes</i> Ad1213	0,6	-	28,03	+	23,74	+	H+	-	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	1	a
2157	Sandwich with chicken meat and vegetables	<i>L. monocytogenes</i> Ad1213	0,6	-	26,92	+	22,75	+	H+	-	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	1	a
1854	Cooked and frozen RTRH food with potatoes, onions, tomatoes	/	/	-	26,13	+	21,33	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	1	b
1920	Couscous with 3 meats	<i>L. monocytogenes</i> Ad1678 <i>L. innocua</i> Ad1676	0,6 0,2	-	23,88	+	19,91	+	H+/H-	+	<i>L. monocytogenes</i> / <i>L. innocua</i>	/	+	+	+	+	PD	PD	1	b
942	Omelette (with potatoes)	<i>L. monocytogenes</i> Ad1195	1,8	-	26,64	+	23,47	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	1	c
943	Pastry with strawberries	<i>L. innocua</i> Ad644	1,6	-	31,16	+	27,38	+	H-	+	<i>L. innocua</i>	/	+	+	+	+	PD	PD	1	c
1882	Pastry with cream	<i>L. monocytogenes</i> Ad1757 <i>L. grayi</i> Ad1490	1,0 1,8	-	32,89	+	27,45	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	1	c
434	Raw ground poultry meat	/	/	-	33,92	+	29,56	+	H+/H-	+	<i>L. monocytogenes</i> / <i>L. innocua</i>	/	+	+	+	+	PD	PD	2	a
834	Raw chicken meat	/	/	-	35,91	+	30,57	+	H-	-	<i>L. welshimeri</i>	/	+	+	+	+	PD	PD	2	a
2269	Raw poultry meat	/	/	-	31,87	+	26,95	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	2	a
2727	Raw veal meat	/	/	-	30,96	+	26,12	+	H+	-	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	2	a
291	Cooked chicken meat (fajitas)	/	/	-	36,86	+	32,36/ 32,66/ 31,57	+/+/+	+d/H+	-	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	2	b
1905	Cooked beef meat	<i>L. ivanovii</i> Ad1292	0,8	-	31,39	+	27,27	+	H+	+	<i>L. ivanovii</i>	/	+	+	+	+	PD	PD	2	b
1906	Cooked veal meat	<i>L. monocytogenes</i> Ad265	1,2	-	21,32	+	17,48	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	2	b
292	Knack sausage	/	/	-	40,07	+	35,2/ 34,11/ 33,60	+/+/+	-	-	<i>L. welshimeri</i> (72h)	/	+	+	+	+	PD	PD	2	c
1658	Smoked chorizo	/	/	-	30,67	+	25,57	+	H-ni/H-	+	<i>L. welshimeri</i>	/	+	+	+	+	PD	PD	2	c
1660	Lamb sausage	/	/	-	39,11	+	33,03	+	H+dni/ H+	-	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	2	c
839	Raw cow milk cheese	/	/	-	38,76	+	35,91	+	H-	+	<i>L. innocua</i>	/	+	+	+	+	PD	PD	3	a
843	Raw cow milk cheese	/	/	-	33,53	+	29,56	+	H-	+	<i>L. innocua</i>	/	+	+	+	+	PD	PD	3	a
2611	Raw milk cheese	<i>L. monocytogenes</i> Ad471	2,4	-	29,27	+	25,56	+	H+	-	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	3	a
2393	Butter with raw milk and salt	<i>L. monocytogenes</i> Ad261 / <i>L. welshimeri</i> Ad1667	1,0/1,0	-	29,93	+	26,06	+	H+	-	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	3	b
932	Pasteurized ewe milk cheese (36% FL)	<i>L. monocytogenes</i> Ad2858	1,8	-	29,13	+	25,62	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	+	PD	PD	3	c
934	Pasteurized goat milk cheese (23% FL)	<i>L. innocua</i> Ad636	3,0	-	34,35	+	30,96	+	H-	+	<i>L. innocua</i>	/	+	+	+	+	PD	PD	3	c
1912	Rice pudding (vanilla)	<i>L. monocytogenes</i> Ad3119 / <i>L. seeligeri</i> Ad3275	0,4 0,0	-	23,69	+	19,87	+	H-ni/H-	+	<i>L. seeligeri</i>	/	+	+	+	+	PD	PD	3	c
1175	Baby leaves (lamb's lettuce)	<i>L. seeligeri</i> Ad1754	2,6	-	29,25	+	24,13	+	-	-	/	H- ( <i>L. seeligeri</i> )	+	+	+	+	PD	PD	4	a

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.

N° Sample	Product	Artificial contamination		Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp										Agreement		Category	Type	
		Strain	Inoculation level/sample (mean)	<i>Listeria</i> spp. final result	PCR result				Confirmation				Final result						
					CFX96		AriaMx		Direct streaking			After subculture in Fraser	All confirmatory tests	CFX96	AriaMx				
					Cq	Result	Cq	Result	O&A	Palcam	Identification								
1375	Celery stalk	<i>L. monocytogenes</i> Ad3268	4,2	-	38,24/38,85/37,42	+/+	33,13/34,11/33,46	+/+	d/H+	-	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	4	a
1377	Endive	<i>L. grayi</i> Ad1296	2,2	-	39,54/39,07/38,71	+/+	33,79/33,86/33,66	+/+	d/d	-	NC	H- ( <i>L. grayi</i> )	+	+	+	PD	PD	4	a
340	Organic vegetables mix	/	/	-	31,84	+	26,78	+	-	-	<i>L. seeligeri</i> (72h)	<i>L. seeligeri</i>	+	+	+	PD	PD	4	b
1037	Zucchini cake with other vegetables	/	/	-	33,44	+	28,84	+	H+	-	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	4	b
1333	Sliced and cooked broccoli	/	/	-	28,88	+	24,88	+	H-	+	<i>L. innocua</i>	/	+	+	+	PD	PD	4	b
1183	Baby carrots ready to eat	<i>L. monocytogenes</i> Ad1180 <i>L. welshimeri</i> Ad3251	1,2 0,8	-	28,79	+	23,83	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	4	c
1394	Artichoke RTE food	<i>L. seeligeri</i> Ad1293	1,6	-	23,09	+	18,45	+	H-	+	<i>L. seeligeri</i>	/	+	+	+	PD	PD	4	c
1461	Vegetables salad (lentil, onions)	<i>L. monocytogenes</i> Ad532	2,2	-	24,04	+	20,5	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	4	c
1464	Hummus and pepper RTE food	<i>L. monocytogenes</i> Ad285	2,2	-	23,39	+	19,06	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	4	c
437	Raw salmon fillet (Scottish)	/	/	-	33,82	+	28,88	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	5	a
2176	Fish fillet	/	/	-	19,22	+	15,81	+	H-	+	<i>L. innocua</i>	/	+	+	+	PD	PD	5	a
1040	Smoked trout fillet	/	/	-	34,04	+	29,68	+	H+	-	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	5	b
1861	Smoked sliced trout	/	/	-	31,11	+	26,6	+	H-	-	<i>L. welshimeri</i>	/	+	+	+	PD	PD	5	b
334	Cooked fish with sauce	/	/	-	35,51	+	30,99	+	H+d/H+	-	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	5	c
428	RTRH salmon fillet	/	/	-	32,47	+	27,83	+	H- ( <i>L. innocua</i> )	-	<i>L. innocua</i>	H+ ( <i>L. monocytogenes</i> )	+	+	+	PD	PD	5	c
442	Whole cooked shrimp	/	/	-	33,05	+	28,14	+	H+	-	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	5	c
593	RTRH fish fillet (Neapolitan sauce)	/	/	-	34,56	+	29,51	+	H+	-	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	5	c
833	Breaded fish fillet	/	/	-	31,08	+	26,28	+	H+/H-	+	<i>L. monocytogenes</i> / <i>L. welshimeri</i>	/	+	+	+	PD	PD	5	c
1032	RTRH fish fillet (with sauce)	/	/	-	29,13	+	25,34	+	H+/H-	+	<i>L. monocytogenes</i> / <i>L. innocua</i>	/	+	+	+	PD	PD	5	c
1332	RTRH fish fillet with sauce	/	/	-	33,99	+	29,73	+	H-	+	<i>L. innocua</i>	/	+	+	+	PD	PD	5	c
1900	Waste, pork meat (production of sausage)	<i>L. welshimeri</i> Ad1175	0,4	-	33,18	+	28,23	+	H-	+	<i>L. welshimeri</i>	/	+	+	+	PD	PD	6	a
1471	Process water, thawing zone (Seafood industry)	/	/	-	38,29	+	34,02	+	H+	+	<i>L. ivanovii</i>	/	+	+	+	PD	PD	6	b
1487	Process water, cooling tank (meat products industry, poultry)	/	/	-	26,12	+	21,72	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	6	b
1888	Wipe, after cleaning (RTRH food industry)	<i>L. monocytogenes</i> Ad621	1,8	-	No Cq/37,97/No Cq	-/+	31,34	+	H+	+	<i>L. monocytogenes</i>	/	+	-	+	NA	PD	6	c
2813	Swab, instrument (seafood industry)	<i>L. monocytogenes</i> Ad2600	1,0	-	29,30	+	24,22	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	6	c
2817	Swab, instrument to spread (production of paste)	<i>L. monocytogenes</i> Ad2503	1,2	-	30,05	+	25,02	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	6	c
2818	Swab, working table (production of pork pâté)	<i>L. monocytogenes</i> Ad2503	1,2	-	28,55	+	24,15	+	H+	+	<i>L. monocytogenes</i>	/	+	+	+	PD	PD	6	c

The analyses of discordant results according to the EN ISO 16140-2:2016 is the following (See Tables 50 and 51):

**Table 50 - Analyses of discordant results- CFX96 Touch™ (standard)**

Category		Type		N+	ND	PPND**	PD	Unpaired	
								(ND+PPND)-PD	AL
1	Composite foods / Ready-to-eat and ready-to-reheat	a	Ready-to-eat	13	1	0	2	-1	3
		b	Ready-to-reheat	12	6	0	2	4	
		c	Confectionaries, pastries and egg products	15	1	0	3	-2	
		Total		40	8	0	7	1	
2	Meat products	a	Raw products (frozen or fresh)	18	2	0	4	-2	3
		b	Meat based products ready to reheat	10	3	0	3	0	
		c	Raw and cooked delicatessen	15	1	0	3	-2	
		Total		43	6	0	10	-4	
3	Milk & dairy products	a	Raw milk cheeses	15	3	0	3	0	3
		b	Other products based on raw milk	10	3	0	1	2	
		c	Heat treated products	17	3	0	3	0	
		Total		42	9	0	7	2	
4	Vegetables	a	Raw products (fresh and frozen)	16	2	0	3	-1	3
		b	Pre-cooked vegetables, vegetables under modified atmosphere	13	4	0	3	1	
		c	Ready-to-eat	16	1	0	4	-3	
		Total		45	7	0	10	-3	
5	Seafood and fishery products	a	Raw products (fresh and frozen)	10	1	0	2	-1	3
		b	Cured & smoked	14	3	0	2	1	
		c	Ready-to-eat, Ready to reheat	15	0	0	7	-7	
		Total		39	4	0	11	-7	
6	Production environmental samples	a	Dusts and residues	12	3	0	1	2	3
		b	Cleaning and process waters	10	2	0	2	0	
		c	Surface samples	13	3	0	3	0	
		Total		35	8	0	6	2	
<b>All categories</b>				<b>244</b>	<b>42</b>	<b>0</b>	<b>51</b>	<b>-9</b>	<b>6</b>

\*\* PPND not included

**Table 51 - Analyses of discordant results- AriaMx™**

Category		Type		N+	ND	PPND**	PD	Unpaired	
								(ND+PPND)-PD	AL
1	Composite foods / Ready-to-eat and ready-to-reheat	a	Ready-to-eat	13	1	0	2	-1	
		b	Ready-to-reheat	12	6	0	2	4	
		c	Confectionaries, pastries and egg products	15	1	0	3	-2	
		Total		40	8	0	7	1	
2	Meat products	a	Raw products (frozen or fresh)	18	1	0	4	-3	
		b	Meat based products ready to reheat	10	3	0	3	0	
		c	Raw and cooked delicatessen	15	1	0	3	-2	
		Total		43	5	0	10	-5	
3	Milk & dairy products	a	Raw milk cheeses	15	3	0	3	0	
		b	Other products based on raw milk	10	3	0	1	2	
		c	Heat treated products	17	3	0	3	0	
		Total		42	9	0	7	2	
4	Vegetables	a	Raw products (fresh and frozen)	16	2	0	3	-1	
		b	Pre-cooked vegetables, vegetables under modified atmosphere	13	3	0	3	0	
		c	Ready-to-eat	16	1	0	4	-3	
		Total		45	6	0	10	-4	
5	Seafood and fishery products	a	Raw products (fresh and frozen)	10	1	0	2	-1	
		b	Cured & smoked	14	3	0	2	1	
		c	Ready-to-eat, Ready to reheat	15	0	0	7	-7	
		Total		39	4	0	11	-7	
6	Production environmental samples	a	Dusts and residues	12	3	0	1	2	
		b	Cleaning and process waters	10	2	0	2	0	
		c	Surface samples	14	3	0	4	-1	
		Total		36	8	0	7	1	
<b>All categories</b>				<b>245</b>	<b>40</b>	<b>0</b>	<b>52</b>	<b>-12</b>	<b>6</b>

\*\* PPND not included

The observed values for ND + PPND - PD meet the acceptability limit for each individual category, for all the combined categories and both Real-Time PCR instruments (CFX96 Touch™ (standard) and AriaMx™) (calculated values ≤ AL).

#### 4.1.7 Enrichment broth storage at $5 \pm 3$ °C for 72 h

268 samples were tested again after storage of the BACGro ULTRA *Listeria* Broth. The following changes were observed (See Table 52).

**Table 52 - Enrichment broth storage**

No Sample	Product	Bio-Rad CFX96 Touch™ standard		AriaMX		Category	Type
		Result before storage	Result After storage	Result before storage	Result after storage		
295	Raw poultry meat	ND	ND	PA	ND	2	a
2167	Raw milk cheese	NA	PD	NA	PD	3	b
2397	Raw cream with raw cow milk	NA	PD	NA	PD	3	b
576	Grilled eggplant	ND	PA	PA	PA	4	b
2260	Rinse water (production of pork meat product)	NA	PD	NA	NA	6	b
1888	Wipe, after cleaning (RTRH food industry)	NA	PD	PD	PD	6	c

The analyses of discordant results become (See Tables 53 and 54).

**Table 53 - Analysis of discordant results after storage 72 h at 5 ± 3°C-  
CFX96 Touch™ (standard)**

Category		Type	N+	ND**	PPND**	PD	Unpaired		
							(ND+PPND)-PD	AL	
1	Composite foods / Ready-to-eat and ready-to-reheat	a	Ready-to-eat	13	1	0	2	-1	
		b	Ready-to-reheat	12	6	0	2	4	
		c	Confectionaries, pastries and egg products	15	0	1	3	-2	
		Total		40	7	1	7	1	
2	Meat products	a	Raw products (frozen or fresh)	18	2	0	4	-2	
		b	Meat based products ready to reheat	10	3	0	3	0	
		c	Raw and cooked delicatessen	15	1	0	3	-2	
		Total		43	6	0	10	-4	
3	Milk & dairy products	a	Raw milk cheeses	15	3	0	3	0	
		b	Other products based on raw milk	12	3	0	3	0	
		c	Heat treated products	17	3	0	3	0	
		Total		44	9	0	9	0	
4	Vegetables	a	Raw products (fresh and frozen)	16	2	0	3	-1	
		b	Pre-cooked vegetables, vegetables under modified atmosphere	13	3	0	3	0	
		c	Ready-to-eat	16	1	0	4	-3	
		Total		45	6	0	10	-4	
5	Seafood and fishery products	a	Raw products (fresh and frozen)	10	1	0	2	-1	
		b	Cured & smoked	14	3	0	2	1	
		c	Ready-to-eat, Ready to reheat	15	0	0	7	-7	
		Total		39	4	0	11	-7	
6	Production environmental samples	a	Dusts and residues	12	3	0	1	2	
		b	Cleaning and process waters	11	2	0	3	-1	
		c	Surface samples	14	3	0	4	-1	
		Total		37	8	0	8	0	
<b>All categories</b>			<b>248</b>	<b>40</b>	<b>1</b>	<b>55</b>	<b>-14</b>	<b>6</b>	

\*\* PPND not included

Table 54 - Analysis of discordant results after storage 72 h at 5 ± 3°C -

AriaMx™

Category		Type	N+	ND**	PPND	PD	Unpaired		
							(ND+PPND)-PD	AL	
1	Composite foods / Ready-to-eat and ready-to-reheat	a	Ready-to-eat	13	1	0	2	-1	
		b	Ready-to-reheat	12	6	0	2	4	
		c	Confectionaries, pastries and egg products	15	1	0	3	-2	
		Total		40	8	0	7	1	
2	Meat products	a	Raw products (frozen or fresh)	18	2	0	4	-2	
		b	Meat based products ready to reheat	10	3	0	3	0	
		c	Raw and cooked delicatessen	15	1	0	3	-2	
		Total		43	6	0	10	-4	
3	Milk & dairy products	a	Raw milk cheeses	15	3	0	3	0	
		b	Other products based on raw milk	12	3	0	3	0	
		c	Heat treated products	17	3	0	3	0	
		Total		44	9	0	9	0	
4	Vegetables	a	Raw products (fresh and frozen)	16	2	0	3	-1	
		b	Pre-cooked vegetables, vegetables under modified atmosphere	13	3	0	3	0	
		c	Ready-to-eat	16	0	1	4	-3	
		Total		45	5	1	10	-4	
5	Seafood and fishery products	a	Raw products (fresh and frozen)	10	1	0	2	-1	
		b	Cured & smoked	14	3	0	2	1	
		c	Ready-to-eat, Ready to reheat	15	0	0	7	-7	
		Total		39	4	0	11	-7	
6	Production environmental samples	a	Dusts and residues	12	3	0	1	2	
		b	Cleaning and process waters	10	2	0	2	0	
		c	Surface samples	14	3	0	4	-1	
		Total		36	8	0	7	1	
All categories			247	40	1	54	-13	6	

\*\* PPND not included

The observed values for ND+PPND - PD meet the acceptability limit for each individual category, for all the combined categories and both Real-Time PCR instruments (CFX96 Touch™ (standard) and AriaMx™) (calculated values ≤ AL).



#### 4.1.8 Confirmation

##### > Unconfirmed samples by cultural methods (PPNA samples)

For 9 samples (CFX96) and 11 samples (AriaMx), the positive PCR result was not confirmed by cultural method.

When positive PCR results were obtained for both thermocyclers but not confirmed using the protocol described in the Kit insert, five plates (COMPASS *Listeria* agar and Palcam) were used for confirmation from BACGro ULTRA *Listeria* broths and after applying a subculture in Fraser broth. In addition, enrichment broths were streaked onto RAPID'L.mono (five replicates).

Despite all these tests it was impossible to recover the *Listeria* spp. strains in the enriched BACGro ULTRA *Listeria* broths. The samples concerned, as well as the PCR results observed are given in Table 55.

Table 55 - Number of samples unconfirmed by cultural methods

N° Sample	Product	Reference method : ISO11290-1♦  <i>Listeria spp</i> final result	BACGene <i>Listeria spp.</i> - PCR result								Confirmation		Agreement		Category	Type
			CFX96 Touch™ (standard)				AriaMx™				Direct streaking	After subculture in Fraser	CFX96 Touch™ (standard)	AriaMx		
			<i>Listeria spp.</i> (Cq)	IPC (Cq)		Result	<i>Listeria spp.</i> (Cq)	IPC (Cq)		Result						
337	Houmous with candied lemon	-	No Cq/No Cq/No Cq	30,22/29,09/28,95	valid/valid/valid	-/-	36,22/No Cq/No Cq	28,53/26,43/26,01	valid/valid/valid	+/-	-	-	NA	PPNA	1	a
1877	Pasta salad with tuna, tomatoes and garlic	-	37,01/35,91/37,31	29,41/29,85/29,45	valid/valid/valid	+/+/+	31,49/32,75/32,75	25,30/25,61/25,21	valid/valid/valid	+/+/+	-	H-d/- (-x5 after subculture, RLMx5:-)	PPNA	PPNA	1	a
1878	Pasta salad with cooked ham, tomatoes	-	38,04/38,12/39,01	29,59/29,39/29,64	valid/valid/valid	+/+/+	34,45/34,62/33,84	25,57/25,60/25,19	valid/valid/valid	+/+/+	-	-(-x5 after subculture, RLMx5:-)	PPNA	PPNA	1	a
1884	Omelette with potatoes	-	30,43/29,82/30,95	29,31/29,58/29,48	valid/valid/valid	+/+/+	26,27/26,96/26,95	25,57/25,74/25,92	valid/valid/valid	+/+/+	-	-(-x5 after subculture)	PPNA	PPNA	1	c
2627	Confectionary with chocolate and caramel	-	No Cq/40,46*/No Cq**	41,78/27,74*/27,64**	Invalid/valid*/valid**	Q/+*/-**	No Cq/No Cq*/No Cq**	No Cq/25,35*/25,35**	Invalid/valid*/valid**	Q/-*/-**	-	-	PPNA	NA	1	c
2820	RTRH beef meat with pepper	-	38,81/No Cq/32,09	28,63/28,09/28,04	valid valid/valid/valid	+/-/+	No Cq	25	valid	-	-	-	PPNA	NA	2	b
290	Sausage with mushrooms	-	40,34/No Cq/No Cq	28,28/29,58/29,48	valid/valid/valid	+/-	39,35/(41,12)/(37,31)	26,43/27,35/26,52	valid/valid/valid	-/-	-	-	PPNA	PPNA	2	c
429	Raw ewe milk cheese	-	No Cq	31,37	valid	-	34,84/No Cq/No Cq	26,87/28,67/28,73	valid/valid/valid	+/-	-	-	NA	PPNA	3	a
435	Raw ewe milk cheese	-	41,36/No Cq/No Cq/	30,52/29,96/30,53	valid/valid/valid	+/-	No Cq	26,15	valid	-	-	-	PPNA	NA	3	a
436	Raw ewe milk cheese	-	41,32/41,81/No Cq	29,71/29,84/29,91	valid/valid/valid	+/+/-	35,79/No Cq/34,80	25,60/27,86/27,83	valid/valid/valid	+/-/+	-	-(-x5 after subculture)	PPNA	PPNA	3	a
2637	Ice cream, flavour cookie	-	No Cq/No Cq/No Cq	29,02/28,34/28,30	valid/valid/valid	-/-	36,46/No Cq/35,92	26,65/29,92/25,99	valid/valid/valid	+/+/-	-	-	NA	PPNA	3	c
1374	Broccolis	-	37,10/38,19/37,52	29,74/30,11/30,45	valid/valid/valid	+/+/+	31,59/34,06/32,70	25,78/25,81/25,90	valid/valid/valid	+/+/+	-	-(-x5 after subculture)	PPNA	PPNA	4	a
1339	Cooked potatoes	-	No Cq	29,39	valid	-	36,82/No Cq/(36,31)	25,78/25,59/26,47	valid/valid/valid	+/-	-	-	PPNA	PPNA	4	b

➤ **Differences observed between streaking onto O&A plates and Palcam plates.**

For 53 samples, only the O&A plate gave a positive result compared to a negative result from Palcam plate. All the positive results obtained from Palcam plates were also positive from O&A plates. Note that when typical colonies were observed on O&A plates only, the identification concluded to the presence of *Listeria monocytogenes* strains on the plates in a majority of cases (70%).

A summary of the differences observed between streaking onto O&A plates and Palcam plates is given in Table 56.

**Table 56 - Differences observed between streaking onto O&A plates and Palcam plates.**

N° Sample	Protocol	Direct streaking				Category	Type
		O&A		Palcam			
		Result	Identification	Result	Identification		
2151	Olives with cheese and tomatoes	H+	<i>L. monocytogenes</i>	-	/	1	a
2153	RTE pepper with cheese	H+	<i>L. monocytogenes</i>	-	/	1	a
2154	Salad with ham, cheese and sauce	H+	<i>L. monocytogenes</i>	-	/	1	a
2157	Sandwich with chicken meat and vegetables	H+	<i>L. monocytogenes</i>	-	/	1	a
2158	Wrap sandwich with sauce	H+	<i>L. monocytogenes</i>	-	/	1	a
1675	RTRH food with ham and cheese	H+(2)	<i>L. monocytogenes</i>	-	/	1	b
1917	Pizza with ham and cheese	H+	<i>L. monocytogenes</i>	-	/	1	b
944	Pastry with custard	H-	<i>L. innocua</i>	-	/	1	c
1853	Raisin bread	H+d(3)/H+	<i>L. monocytogenes</i>	-	/	1	c
2250	Pastry flan	H+ni/H+	<i>L. monocytogenes</i>	-	/	1	c
2252	Pastry with cream and strawberry	H+ni/H+	<i>L. monocytogenes</i>	-	/	1	c
295	Raw poultry meat	+d/H-	<i>L. innocua</i>	-	/	2	a
834	Raw chicken meat	H-	<i>L. welshimeri</i>	-	/	2	a
2727	Raw veal meat	H+	<i>L. monocytogenes</i>	-	/	2	a
291	Cooked chicken meat (fajitas)	+d/H+	<i>L. monocytogenes</i>	-	/	2	b
326	Breaded chicken cutlet	H+	<i>L. monocytogenes</i>	-	/	2	b
1657	Spicy merguez	H-dni/H+	<i>L. monocytogenes</i> / <i>L. innocua</i> (72h)	-	/	2	c
1659	Tunisian merguez	H-ni/H-	<i>L. innocua</i>	-	/	2	c
1660	Lamb sausage	H+dni/H+	<i>L. monocytogenes</i>	-	/	2	c
1676	Merguez	H+/H-d	<i>L. monocytogenes</i> / <i>L. innocua</i>	-	/	2	c
2164	Raw goat milk cheese	H-ni/H-	<i>L. seeligeri</i>	-	/	3	a
2611	Raw milk cheese	H+	<i>L. monocytogenes</i>	-	/	3	a
1857	Ewe milk	H+	<i>L. monocytogenes</i>	-	/	3	b
2167	Raw milk cheese	H+ni/H+	<i>L. ivanovii</i>	-	/	3	b
2170	Cream with raw cow milk	H-d(1)	<i>L. ivanovii</i>	-	/	3	b
2392	Raw butter with salt	H+	<i>L. monocytogenes</i>	-	/	3	b
2393	Butter with raw milk and salt	H+	<i>L. monocytogenes</i>	-	/	3	b

N° Sample	Protocol	Direct streaking				Category	Type
		O&A		Palcam			
		Result	Identification	Result	Identification		
2397	Raw cream with raw cow milk	H+(7)	<i>L. monocytogenes</i>	-	/	3	b
2255	Pasteurised cheese, mozzarella	H+	<i>L. monocytogenes</i>	-	/	3	c
2256	Pasteurised cheese, mozzarella	H+	<i>L. monocytogenes</i>	-	/	3	c
2257	Pasteurised cheese, ricotta	H+ni/H+	<i>L. monocytogenes</i>	-	/	3	c
1176	Fresh spinach	H-	<i>L. welshimeri</i>	-	/	4	a
1375	Celery stalk	d/H+	<i>L. monocytogenes</i>	-	/	4	a
1037	Zucchini cake with other vegetables	H+	<i>L. monocytogenes</i>	-	/	4	b
1180	Vegetable macédoine	H+	<i>L. monocytogenes</i>	-	/	4	b
1181	Vegetable macédoine	H+	<i>L. monocytogenes</i>	-	/	4	b
1382	Bagged lettuce	+H(5)	<i>L. monocytogenes</i>	-	/	4	b
1179	Guacamole	H-d/H-	<i>L. seeligeri</i>	-	/	4	c
1040	Smoked trout fillet	H+	<i>L. monocytogenes</i>	-	/	5	b
1046	Organic smoked salmon fillet	H-	<i>L. welshimeri</i>	-	/	5	b
1861	Smoked sliced trout	H-	<i>L. welshimeri</i>	-	/	5	b
2178	Smoked sliced trout	H-	<i>L. welshimeri</i>	-	/	5	b
334	Cooked fish with sauce	H+d/H+	<i>L. monocytogenes</i>	-	/	5	c
426	RTRH breaded fish fillet	H-	<i>L. innocua</i>	-	/	5	c
428	RTRH salmon fillet	H-	<i>L. innocua</i>	-	/	5	c
442	Whole cooked shrimp	H+	<i>L. monocytogenes</i>	-	/	5	c
593	RTRH fish fillet (Neapolitan sauce)	H+	<i>L. monocytogenes</i>	-	/	5	c
1662	Waste, fish (seafood industry)	H+dni/H+	<i>L. monocytogenes</i>	-	/	6	a
1028	Process water (aromatic herbs industry)	H+	<i>L. monocytogenes</i>	-	/	6	b
2258	Rinse water (production of vegetable steak)	H+	<i>L. monocytogenes</i>	-	/	6	b
2260	Rinse water (production of pork meat product)	H+(1)	<i>L. monocytogenes</i>	-(1)	/	6	b
1886	Wipe, working table, after cleaning (production of vegetable steak)	H+(5)	<i>L. monocytogenes</i>	-	/	6	c
1887	Wipe, working table, after cleaning (production of vegetable steak)	H+	<i>L. monocytogenes</i>	-	/	6	c

#### 4.1.9 PCR inhibition

432 DNA extracts were tested after incubation time and 269 after enrichment broths storage with both thermocyclers (CFX96 Standard and AriaMx). Combining both thermocyclers, 9 PCR inhibitions were observed (0,6%). 8 of them concern only 2 samples (see Table 57). A 1:5 dilution in sterile water allowed to obtain a result for 7 tests. For sample n°2638 (ice cream, flavour chocolate brownie) a 1:10 dilution was necessary (for both thermocyclers) to obtain an interpretable result.

Table 57 - Samples with PCR inhibitions

Year of analysis	Sample N°	Product	Incubation time	BACGene <i>Listeria</i> spp. - PCR result								Category	Type
				CFX96 Touch™ (standard)				AriaMx™					
				<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result		
	Cq	result		Cq	result								
2023	2627	Confectionary with chocolate and caramel	18h	No Cq/40,46*/No Cq**	41,78/27,74*/27,64**	Invalid/valid*/valid**	Q/+*/-**	No Cq/No Cq*/No Cq**	No Cq/25,35*/25,35**	Invalid/valid*/valid**	Q/-*/-**	1	c
			18h + 72h at 5±3°C	No Cq/No Cq*/No Cq**	No Cq/28,38*/28,68**	Invalid/valid*/valid**	Q/-*/-**	No Cq/No Cq*/No Cq**	No Cq/27,00*/25,52**	Invalid/valid*/valid**	Q/-*/-**		
2023	2638	Ice cream, flavour chocolate brownie	18h	No Cq/No Cq*/No Cq**	No Cq/28,47*/28,70**	Invalid/valid*/valid**	Q/-*/-**	No Cq/(39,55)*/No Cq**	No Cq/No Cq*/No Cq**	Invalid/valid*/valid**	Q/-*/-**	3	c
			18h + 72h at 5±3°C	No Cq/No Cq*/No Cq**	No Cq/38,44*/27,64**	Invalid/Invalid*/valid**	Q/Q*/-**	No Cq/No Cq*/No Cq**	No Cq/41,66*/25,63**	Invalid/Invalid*/valid**	Q/Q*/-**		
2023	2729	RTE vegetable, tomatoes with oregano	18h	No Cq	29,90	valid	-	No Cq/No Cq*/No Cq**	No Cq/26,18*/26,14**	Invalid/valid*/valid**	Q/-*/-**	4	c

\*: 1:5 dilution

\*\*: 1:10 dilution

## 4.2 Relative level of detection

*The relative level of detection is the level of detection at  $P = 0.50$  ( $LOD_{50}$ ) of the alternative (proprietary) method divided by the level of detection at  $P = 0.50$  ( $LOD_{50}$ ) of the reference method.*

The RLOD is defined as the ratio of the alternative and reference methods:

$$RLOD = \frac{LOD_{Alt.}}{LOD_{Ref.}}$$

*The relative detection level is the smallest number of culturable micro-organisms that can be detected in the sample in 50% of occasions by the alternative and reference methods.*

### 4.2.1 Experimental design

Six (matrix/strain) pairs were analyzed by the reference method and by the alternative method (See Table 58).

The following protocol was applied:

- A negative control: 5 samples,
- A low contamination level providing fractional recovery data, with 20 replicates,
- A high contamination level, with 5 replicates.

A total plate count determination on each matrix was performed to estimate the total microbial load on the day of analysis.

With the agreement of the AFNOR Technical Committee, for matrix availability reasons, the frozen cantaloupe matrix (vegetable category) has been replaced by frozen green peas.

**Table 58 - Defined (matrix/strain) pairs for the RLOD determination**

Category	Matrix	Inoculated strain	Origin	Inoculation protocol
1	Deli-salad (Piémontaise)	<i>Listeria monocytogenes</i> Ad494	Deli salad	Seeding protocol Storage 48h at 2-8°C
2	Frankfurters	<i>Listeria monocytogenes</i> Ad669	Rillettes	
3	Soft white cheese	<i>Listeria ivanovii</i> Ad1337	Cheese	
4	Frozen green peas	<i>Listeria seeligeri</i> Ad1754	Zucchini	Seeding protocol Storage 2 weeks at - 20°C
5	Frozen shrimps	<i>Listeria innocua</i> Ad1200	Pollock	Seeding protocol Storage 2 weeks at - 20°C
6	Process water	<i>Listeria monocytogenes</i> Ad551	Environmental sample	Seeding protocol Storage 48h at 2-8°C

#### 4.2.2 Calculation and interpretation of the RLOD

The raw data are given in **Appendix 12**.

For the RLOD Frankfurters (from meat product category), contaminated with *Listeria monocytogenes* Ad669, one of the 5 samples at the Level 0 gave confirmed positive PCR result. After identification, the recovered strain was a *L. innocua* strain, this means that the matrix was naturally contaminated. As this strain was not recovered in the other plates (only halo positive colonies have been observed), the PCR positive results of the other samples can be associated only to a *L. monocytogenes* strain. In agreement with the AFNOR technical committee, these data were kept for interpretation.

The RLOD calculations were performed using the Excel spreadsheet available at <http://standards.iso.org/iso/16140> - RLOD (clause 5-1-4-2 Calculation and interpretation of RLOD) version 15.08.2015. The RLOD are given in Table 59.

**Table 59 – Presentation of RLOD before and after confirmation of the alternative method results- CFX96 Touch™ (standard) and AriaMx™**

Category	Name (Matrix/strain)	RLOD	RLODL	RLODU	b=ln (RLOD)	sd(b)	z-Test statistic	p-value	AL
1	Deli-salad (Piémontaise) <i>Listeria monocytogenes</i> Ad494	0,974	0,450	2,110	-0,026	0,387	0,068	1,055	2,5
2	Frankfurters <i>Listeria monocytogenes</i> Ad669	0,892	0,351	2,265	-0,114	0,466	0,245	1,194	
3	Soft white cheese <i>Listeria ivanovii</i> Ad1337	1,784	0,766	4,152	0,579	0,422	1,370	0,171	
4	Frozen green peas <i>Listeria seeligeri</i> Ad1754	0,640	0,280	1,463	-0,447	0,414	1,080	1,720	
5	Frozen shrimps <i>Listeria innocua</i> Ad1200	0,868	0,392	1,926	-0,141	0,398	0,354	1,277	
6	Process water <i>Listeria monocytogenes</i> Ad551	1,511	0,702	3,250	0,412	0,383	1,077	0,282	
<b>Combined</b>		<b>1,056</b>	<b>0,768</b>	<b>1,451</b>	<b>0,054</b>	<b>0,159</b>	<b>0,340</b>	<b>0,734</b>	

The LOD<sub>50</sub> % calculations according to Wilrich & Wilrich POD-LOD calculation program - version 11, 2022-10-12 test are given in Table 60.

**Table 60 – LOD<sub>50</sub> results- CFX96 Touch™ (standard) and AriaMx™**

Category	(Strain / matrix) pair	Level of detection at 50% (CFU / test portion) according to Wilrich & Wilrich <sup>2</sup>	
		Reference method	Alternative method
1	Deli-salad (Piémontaise) <i>Listeria monocytogenes</i> Ad494	0,7[0,4;1,3]	0,8[0,4;1,4]
2	Frankfurters <i>Listeria monocytogenes</i> Ad669	0,5[0,3;0,9]	0,5[0,3;0,9]
3	Soft white cheese <i>Listeria ivanovii</i> Ad1337	0,7[0,4;1,2]	1,2[0,6;2,2]
4	Frozen green peas <i>Listeria seeligeri</i> Ad1754	0,7[0,4;1,2]	0,4[0,2;0,7]
5	Frozen shrimps <i>Listeria innocua</i> Ad1200	0,4[0,3;0,8]	0,4[0,2;0,7]
6	Process water <i>Listeria monocytogenes</i> Ad551	0,4[0,3;1,0]	0,7[0,4;1,3]
<b>Combined results</b>		<b>0,6[0,5;0,7]</b>	<b>0,6[0,5;0,8]</b>

<sup>2</sup> Wilrich, C., and P.-Th. Wilrich: Estimation of the POD function and the LOD of a qualitative microbiological measurement method. AOAC International **92** (2009) 1763 - 1772.



### 4.2.3 Conclusion

**The RLOD values (using the confirmed alternative method results) meet the acceptability limit 2.5 for unpaired studies, for all matrix/strain pairs tested.**

**The LOD<sub>50</sub> varies from 0.4 to 0.7 CFU/test portion for the reference method and from 0.4 to 1.2 CFU/test portion for the alternative method.**

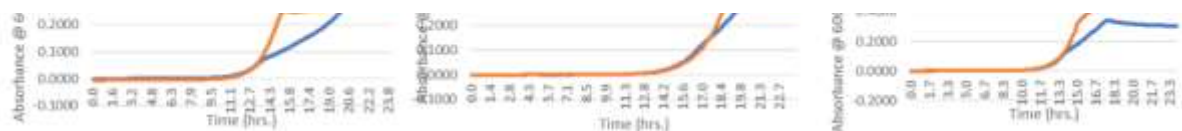
## 4.3 Inclusivity / exclusivity

*The inclusivity is the ability of the alternative method to detect the target analyte from a wide range of strains. The exclusivity is the lack of interference from a relevant range of non-target strains of the alternative method*

It was proposed to the AFNOR Technical Committee to not perform again the inclusivity study by the expert laboratory. Comparison data of the BACGro ULTRA Listeria Broth and the Actero™ Listeria Enrichment media showing that the previous broth is more selective than the BACGro ULTRA Listeria Broth were submitted by Gold Standard Diagnostics Freiburg GmbH in a separate report. A summary of the results is provided hereafter.

### 4.3.1 Inclusivity and exclusivity testing (internal data from Gold Standard Diagnostics Freiburg GmbH)

For inclusivity, 34 *Listeria* strains (18 *L. monocytogenes*, 3 *L. seeligeri*, 3 *L. welshimeri*, 3 *L. ivanovii*, 3 *L. innocua* and 2 *L. grayi*) were inoculated in parallel into a tube of BACGro ULTRATM Listeria broth (BULB) and Actero™ Elite Listeria medium at 10 to 100 CFU and incubated for 24h at 37°C. Growth was assessed by tube turbidity. All the strains grew in both formulations. The growth curves from selected strains are provided Figure 1.



Measurement via optical density shows that all tested *Listeria* species grew to similar levels in both media.

For exclusivity, 6 strains (2 *S. aureus*, 2 *E. faecalis*, 1 *B. subtilis* and 1 *E. coli*) were tested, the two media were inoculated at 10000 CFU per tube and incubated for 24h at 37°C. The two media failed to inhibit the growth of the *S. aureus* strains but for the

initial validation study two *Staphylococcus aureus* strains were grown in BPW and were not detected by PCR.

#### 4.3.2 Co-inoculations of *Listeria* with high background of *Enterococcus faecalis*

Growth experiments with a high background of *E. faecalis* (105 CFU/10 mL Actero and BULB) were performed with *L. seeligeri*, *L. welshimeri* and *L. monocytogenes* (10 CFU/10 mL Actero and BULB) compared to growth in pure cultures. The broths were incubated at 37°C. PCR tests were performed using the BACGene *Listeria* Multiplex kit after 18 and 24 h incubation time on both media (Actero and BULB). See Tables 61 and 62.

**Table 61 – Cq-values of the *Listeria* spp. target analyzed with the BACGene *Listeria* Multiplex in the HEXTM channel**

Strains Pure & Mix cultures	BACGene <i>Listeria</i> Multiplex in the HEXTM channel 18h		BACGene <i>Listeria</i> Multiplex in the HEXTM channel 24h	
	BULB	Actero	BULB	Actero
<i>L. seeligeri</i>	16.49	19.75	13.06	14.64
<i>L. seeligeri</i> + <i>E. faecalis</i>	20.36	16.09	13.00	14.20
<i>L. monocytogenes</i>	15.46	17.71	13.94	15.07
<i>L. monocytogenes</i> + <i>E. faecalis</i>	15.45	17.12	13.73	14.96
<i>L. welshimeri</i>	14.53	15.76	13.09	14.68
<i>L. welshimeri</i> + <i>E. faecalis</i>	14.62	16.30	12.92	14.76

**Table 62 – Cq-values of the *Listeria monocytogenes* target analyzed with the BACGene *Listeria* Multiplex in the ROXTM channel**

Pure & Mix cultures	BACGene <i>Listeria</i> Multiplex in the ROXTM channel 18h		BACGene <i>Listeria</i> Multiplex in the ROXTM channel 24h	
	BULB	Actero	BULB	Actero
<i>L. monocytogenes</i>	18.34	20.72	16.81	18.15
<i>L. monocytogenes</i> + <i>E. faecalis</i>	17.80	19.88	16.35	17.81

Measurement via optical density shows that all tested *Listeria* species grew to similar levels in both media. Growth of *S. aureus* could not be suppressed by both media, but all other tested exclusivity strains were completely suppressed by both media. Results from the performed growth curve experiments show that exponential growth started at similar incubation times for both media, with the exception of *L. grayi*, where the exponential growth phase started earlier in BULB. Enrichment in BULB also achieved higher cell concentrations at stationary phase for most strains tested.

During asymmetric tests, enrichment in BULB was leading to earlier Cq-values compared to Actero for most of the tested combinations, pure or mixed cultures.

## 5 CONCLUSION

The **method comparison study conclusions** are:

➤ **For the use of the Actero™ *Listeria* enrichment broth**

The method comparison study scheme corresponds to an unpaired study design as the reference and the alternative methods have different primary enrichment procedures.

In the Sensitivity Study, 6 categories were tested: 5 human food categories and environmental samples. The protocol of the alternative method shows for all the categories:

Thermocycler	Kit	Positive deviation	Negative deviation
BACGene <i>Listeria</i>	CFX96	50	36
Multiplex	AriaMx	49	36
BACGene <i>Listeria</i> spp.	CFX96	50	36
	AriaMx	50	36

The (ND - PD) values are below the acceptability limits (AL) for each category, and for the 6 tested categories.

The Relative Levels of Detection (RLOD) are all below the AL fixed at 2.5 for the unpaired study design for all matrix/strain pairs.

The inclusivity and exclusivity testing gave the expected results for the 53 target strains and the 31 non target strains.

It is possible to store the primary enrichment broth for 72 h at 5°C ± 3°C.

The negative results are available in 1 day and the positive results in 2 or 3 days.

The alternative method fulfils all the requirements of EN ISO 16140-2:2016 and the AFNOR technical rules.

> **For the use of a new enrichment broth: BACGro ULTRA Listeria Broth (BULB)**

The extension study scheme corresponds to an UNPAIRED study design as the alternative and reference methods have different enrichment procedure.

In the sensitivity study, 6 categories were tested: 5 food categories and the production environmental samples.

The protocol of the alternative method shows 51 (CFX96) and 52 (AriaMx) positive deviations (PD) and 42 (CFX96) and 40 (AriaMx) negative deviations (ND) for all combined categories. The ND+PPND - PD meet the acceptability limits (AL) whatever the categories, and as well for the six combined categories for both cyclers tested.

The Relative Levels of Detection (RLOD) meet the AL fixed at 2.5 for the unpaired data study whatever the matrix/strain pairs tested and for both cyclers.

The internal testing performed by Gold Standard Diagnostics showed that the BACGro ULTRA™ Listeria Broth (BULB) performs similar or slightly superior and is not more selective than the previously certified enrichment medium in scope of the BACGene *Listeria* methods Actero™ Elite Listeria (FoodChek Systems Inc.). It is therefore proposed to keep initial inclusivity and exclusivity data and not test again with this new media.

It is possible to store the primary enrichment broth for 72 h at  $5 \pm 3^\circ\text{C}$ .


The alternative method fulfils all the EN ISO 16140-2:2016 and AFNOR technical rules (PR revision 7).

The **inter-laboratory study conclusions** are:


The data and interpretations comply with the EN ISO 16140-2:2016 requirements.  
The **BACGene *Listeria* Multiplex and & BACGene *Listeria* spp. are considered equivalent to the ISO standard.**

Quimper, 30 October 2023

Lizaïg GOUGUET  
Technical Study Manager  
Validation of Alternative methods



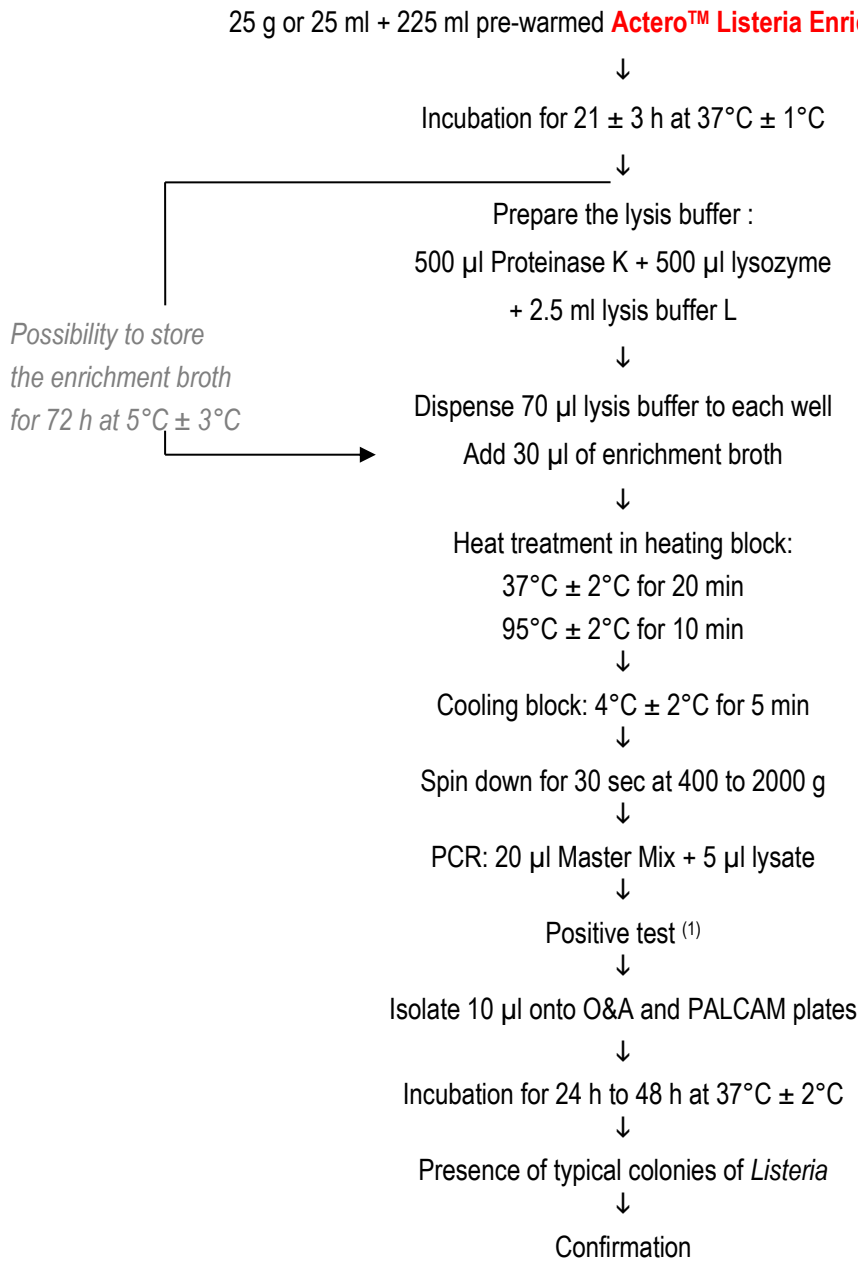
Maryse RANNOU  
Project Manager  
Validation of Alternative methods



I hereby attest to the validation of the results of the analyses carried out under the COFRAC accreditation.

I hereby attest to the validation of the verification of the conformity of the report (opinion and interpretation).

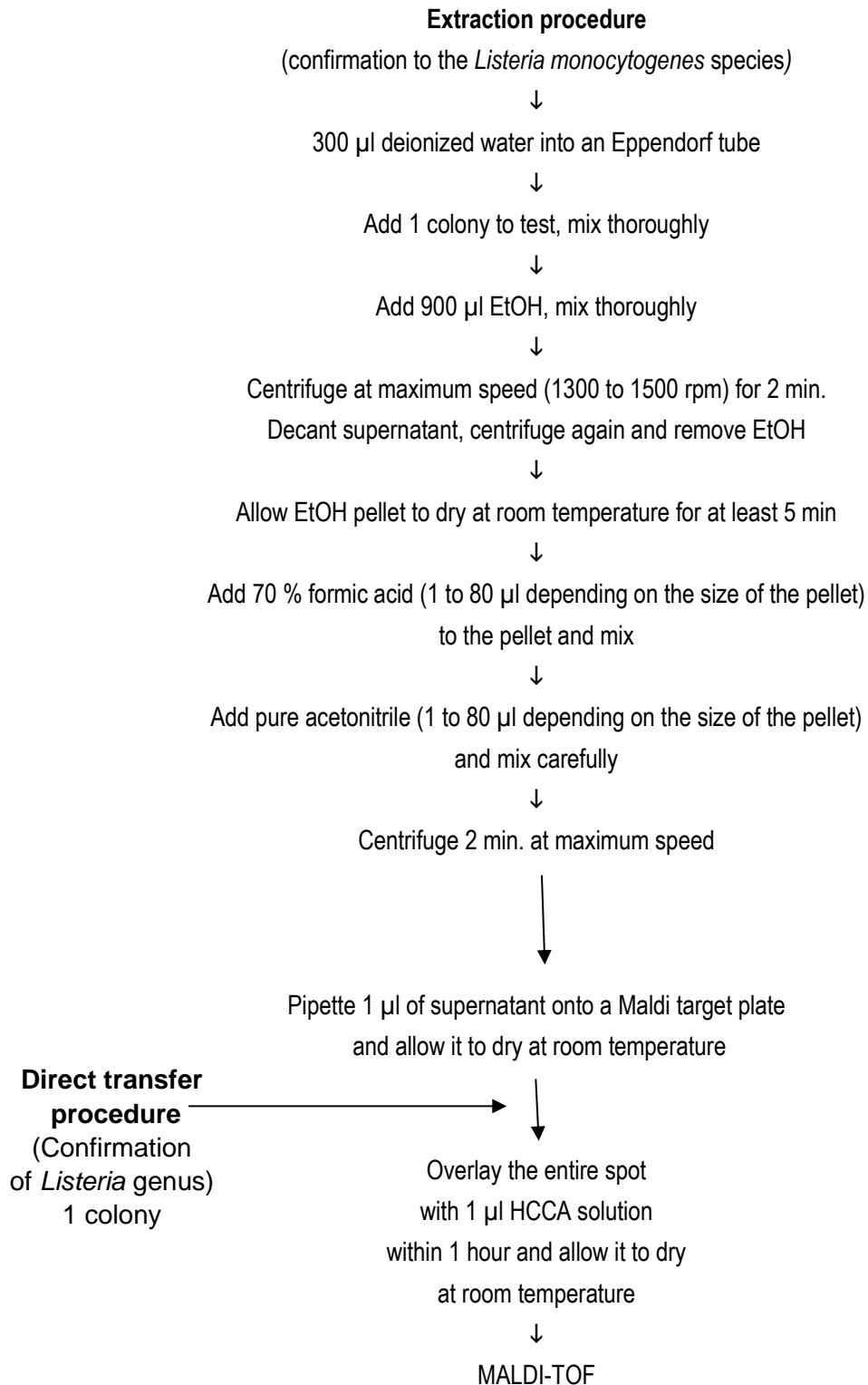
**Appendix 1 – Flow diagram of the BACGene *Listeria* Multiplex and the BACGene *Listeria* spp. Test Kits**



The only presence of typical colonies allows to confirm the positive PCR tests, but it is possible to confirm the colonies:

- By the tests described in the ISO method
- By using the MALDI Biotyper of Bruker from PALCAM, O&A or TSYEA plates

## Appendix 2 - Protocols used for *Listeria* genus and *Listeria monocytogenes* confirmation (MALDI-TOF)



## MALDI-TOF

Results interpretation

Extraction procedure	Confirmation to <i>Listeria</i> spp.	Confirmation to <i>Listeria monocytogenes</i>
No	Yes	No
Yes	Yes	Yes

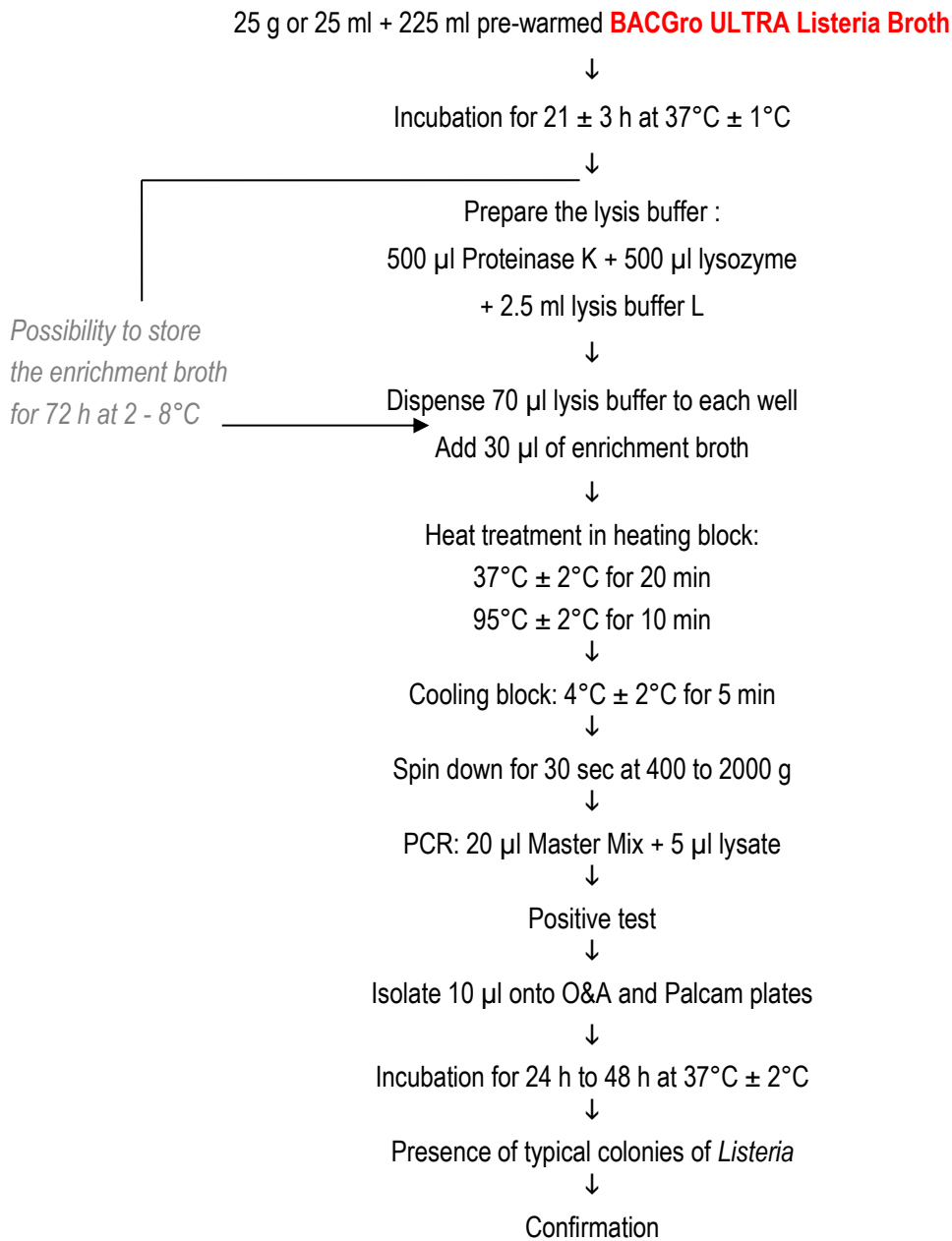
Value	Description	Symbols	Color
2.00 – 3.00	High confidence identification	(+++)	Green
1.70 – 1.99	Low confidence identification	(+)	Yellow
0.00 – 1.69	No possible identification	(-)	Red

Examples of results and interpretation

Extraction procedure	First choice	Second choice	<i>Listeria</i> spp.	<i>Listeria monocytogenes</i>
No	<i>L. monocytogenes</i> 2.02	<i>L. monocytogenes</i> 1.92	+	/
No	<i>L. monocytogenes</i> 1.97	<i>L. monocytogenes</i> 1.78	+	/
No	No peak or no possible identification 0.00	No peak or no possible identification 0.00	Test again	Test again
No	<i>L. Seeligeri</i> 2.28	<i>L. Seeligeri</i> 2.24	+	/
Yes	<i>L. monocytogenes</i> 2.20	<i>L. monocytogenes</i> 2.16	+	+
No	<i>L. welshimeri</i> 1.80	<i>L. welshimeri</i> 1.72	+	/
No	<i>L. innocua</i> 1.71	No possible identification 1.66	+	/
Yes	<i>L. monocytogenes</i> 2.02	<i>L. monocytogenes</i> 1.92	+	+



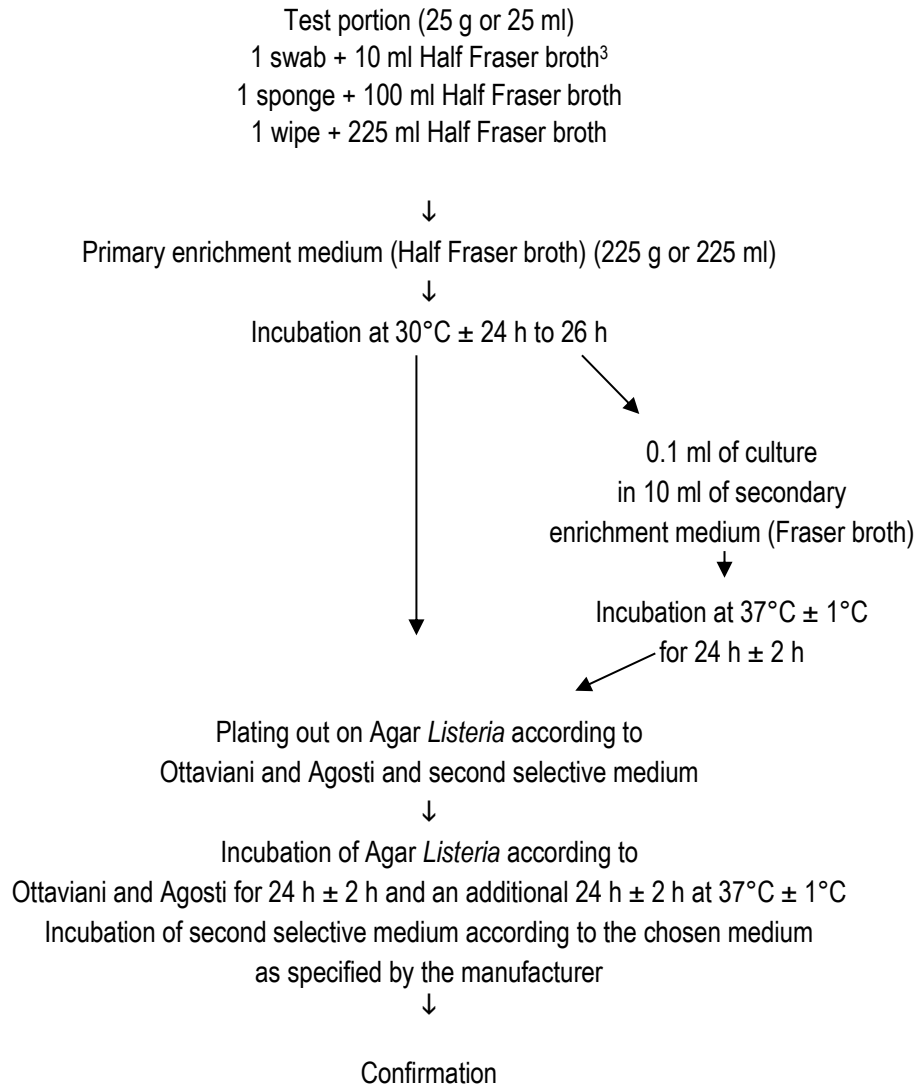
### Appendix 3 – Flow diagram of the alternative method: BACGene *Listeria* spp. Test Kit (Extension study, 2023)



The only presence of typical colonies allows to confirm the positive PCR tests, but it is possible to confirm the colonies:

- By the tests described in the ISO method
- By using the MALDI Biotyper of Bruker from PALCAM, O&A or TSYEA plates

**Appendix 4 – Flow diagram of the reference method ISO 11290-1 (May 2017):  
Microbiology of the food chain - Horizontal method for the detection and enumeration  
of *Listeria monocytogenes* and other *Listeria* spp. - Part 1: detection method**



Target	Gram	Catalase	Beta hemolysis	CAMP test	Carbohydrates
<i>Listeria</i> spp	x	x			

<sup>3</sup> For sampling after cleaning process pre-moisten

- 1 swab + 1 ml broth universal neutralizing (+ 9 ml Half-Fraser)
- 1 sponge + 10 ml broth universal neutralizing (+ 90 ml Half-Fraser)
- 1 wipe + BPW + 10 % neutralizing agent (+ 225 ml Half-Fraser)

**Appendix 5 – Artificial contamination of samples**  
**(Enrichment step using the Actero™ Listeria Enrichment media)**

N° Sample	Product (French name)	Product	Artificial contaminations				Global result
			Strain	Origin	Injury protocol	Inoculation level/sample	
3339	Abondance lait cru	Raw milk cheese	<i>L.monocytogenes</i> Ad664	Raw milk cheese	Seeding 48h 4°C	0-1-0-1-0 (0.4)	-
3340	Comte lait cru	Raw milk cheese	<i>L.monocytogenes</i> Ad664	Raw milk cheese	Seeding 48h 4°C	0-1-0-1-0 (0.4)	+
3342	Grana padano lait cru	Raw milk cheese	<i>L.monocytogenes</i> Ad664	Raw milk cheese	Seeding 48h 4°C	0-1-0-1-0 (0.4)	+
3343	Rocamadour lait cru	Raw goat's milk cheese	<i>L.monocytogenes</i> Ad1236	Raw milk cheese	Seeding 48h 4°C	2-1-1-3-0 (1.4)	-
3344	Roquefort lait cru	Raw ewe's milk cheese	<i>L.monocytogenes</i> Ad1236	Raw milk cheese	Seeding 48h 4°C	2-1-1-3-0 (1.4)	-
3345	Morbier lait cru	Raw milk cheese	<i>L.monocytogenes</i> Ad1236	Raw milk cheese	Seeding 48h 4°C	2-1-1-3-0 (1.4)	-
3346	Crème au lait cru 1	Raw milk cream	<i>L.monocytogenes</i> Ad665	Raw milk	Seeding 48h 4°C	0-0-0-1-1 (0.4)	+
3347	Crème au lait cru 2	Raw milk cream	<i>L.ivanovii</i> L41	Raw milk	Seeding 48h 4°C	0-0-1-1-0 (0.4)	+
3348	Crème au lait cru 6	Raw milk cream	<i>L.ivanovii</i> L41	Raw milk	Seeding 48h 4°C	0-0-1-1-0 (0.4)	+
3349	Bleu des causses lait pasteurisé	Pasteurised milk cheese	<i>L.innocua</i> Ad657	Pasteurised cheeses	Seeding 48h 4°C	0-1-0-0-0 (0.2)	+
3352	Déchet poudre de lait	Dust (milk powder)	<i>L.monocytogenes</i> Ad627	Environmental samples (milk industry)	Seeding 48h 4°C	0-1-1-0-1 (0.6)	-
3353	Déchet poissons	Dust (fish)	<i>L.seeligeri</i> Ad1267	Environmental samples (fish industry)	Seeding 48h 4°C	1-0-0-1-0 (0.4)	+
3354	Eau rinçage pousoir (production saucisson poisson)	Process water (Pork and fish production)	<i>L.monocytogenes</i> Ad548	Environmental samples (fish industry)	Seeding 48h 4°C	0-1-0-0-1 (0.4)	+
3356	Eau rinçage cutter (production chair saumon)	Process water (fish production)	<i>L.monocytogenes</i> Ad548	Environmental samples (fish industry)	Seeding 48h 4°C	0-1-0-0-1 (0.4)	+
3357	Lingette planche découpe poisson (thon saumon)	Wipe (fish production)	<i>L.monocytogenes</i> Ad1272	Environmental samples	Seeding 48h 4°C	2.8	+
3358	Lingette lave botte	Wipe (fish production)	<i>L.monocytogenes</i> Ad1272	Environmental samples	Seeding 48h 4°C	2.8	+
3359	Lingette bac stockage poisson	Wipe (fish production)	<i>L.monocytogenes</i> Ad1272	Environmental samples	Seeding 48h 4°C	2.8	+
3360	Lingette bac stockage épices (production poisson)	Wipe (fish production)	<i>L.innocua</i> Ad1266	Environmental samples	Seeding 48h 4°C	0.5	+
3361	Lingette Multivac conditionneuse	Wipe (fish production)	<i>L.innocua</i> Ad1266	Environmental samples	Seeding 48h 4°C	0.5	+

N° Sample	Product (French name)	Product	Artificial contaminations				Global result
			Strain	Origin	Injury protocol	Inoculation level/sample	
3362	Lingette Hall techno table production	Wipe (fish production)	<i>L.innocua</i> Ad1266	Environmental samples	Seeding 48h 4°C	0.5	-
4188	Eclair vanille	Pastry	<i>L.innocua</i> Ad644	Pastries	Seeding 48h 4°C	1-1-2-1-0 (1.0)	+
4189	Eclair vanille	Pastry	<i>L.monocytogenes</i> Ad551	Pastries	Seeding 48h 4°C	1-1-0-1-1 (0.8)	+
4190	Millefeuille	Pastry	<i>L.innocua</i> Ad644	Pastries	Seeding 48h 4°C	1-1-2-1-0 (1.0)	+
4191	Millefeuille	Pastry	<i>L.monocytogenes</i> Ad551	Pastries	Seeding 48h 4°C	1-1-0-1-1 (0.8)	+
4192	Omelette Tortilla nature	Omelette	<i>L.monocytogenes</i> Ad1195	Omelette	Seeding 48h 4°C	1-1-0-1-1 (0.8)	+
4193	Omelette Tortilla nature	Omelette	<i>L.monocytogenes</i> Ad1757	Omelette	Seeding 48h 4°C	3-3-0-0-1 (1.4)	+
4194	Omelette tortilla oignons	Omelette	<i>L.monocytogenes</i> Ad1195	Omelette	Seeding 48h 4°C	1-1-0-1-1 (0.8)	-
4195	Coq au vin	Meat based products ready to reheat	<i>L.monocytogenes</i> Ad666	Poultry product	Seeding 48h 4°C	1-1-0-1-1 (0.8)	+
4196	Porc sauce aigre douce	Meat based products ready to reheat	<i>L.welshimeri</i> Ad1221	Pork product	Seeding 48h 4°C	5-2-6-4-7 (4.8)	+
4197	Porc sauce aigre douce	Meat based products ready to reheat	<i>L.innocua</i> 17765	Pork product	Seeding 48h 4°C	1-1-0-1-0 (0.6)	+
4198	Fricadelles sauce tomate	Meat based products ready to reheat	<i>L.welshimeri</i> Ad1221	Pork product	Seeding 48h 4°C	5-2-6-4-7 (4.8)	+
4199	Fricadelles sauce tomate	Meat based products ready to reheat	<i>L.innocua</i> 17765	Pork product	Seeding 48h 4°C	1-1-0-1-0 (0.6)	+
4200	Bœuf aux oignons	Meat based products ready to reheat	<i>L.monocytogenes</i> Ad1206	Beef product	Seeding 48h 4°C	5-2-1-1-3 (2.4)	+
4201	Bœuf aux oignons	Meat based products ready to reheat	<i>L.welshimeri</i> Ad1235	Beef product	Seeding 48h 4°C	1-2-0-3-6 (1.2)	+
4202	Carottes râpées assaisonnées	Seasoned grated carrots	<i>L.monocytogenes</i> Ad1719	Vegetables	Seeding 48h 4°C	2-1-2-1-0 (1.2)	+
4203	Carottes râpées assaisonnées	Seasoned grated carrots	<i>L.welshimeri</i> Ad1668	Vegetables	Seeding 48h 4°C	1-0-0-1-1 (0.6)	+
4204	Concombre au fromage blanc et ciboulette	Seasoned cucumber	<i>L.monocytogenes</i> Ad1719	Vegetables	Seeding 48h 4°C	2-1-2-1-0 (1.2)	+
4206	Macédoine de légumes avec mayonnaise	Macédoine	<i>L.monocytogenes</i> Ad1719	Vegetables	Seeding 48h 4°C	2-1-2-1-0 (1.2)	+
4208	Céleri rémoulade	Grated celery	<i>L.welshimeri</i> Ad1668	Vegetables	Seeding 48h 4°C	1-0-0-1-1 (0.6)	-
4306	Brique brebis au lait pasteurisé	Pasteurised ewe's milk cheese	<i>L.monocytogenes</i> 153	Cheese	Seeding 48h 4°C	2-5-1-3-4 (3.0)	+
4307	Fromage au lait pasteurisé	Pasteurised milk cheese	<i>L.monocytogenes</i> 153	Cheese	Seeding 48h 4°C	2-5-1-3-4 (3.0)	+

N° Sample	Product (French name)	Product	Artificial contaminations				Global result
			Strain	Origin	Injury protocol	Inoculation level/sample	
4308	Tomme des Pyrénées au lait pasteurisé	Pasteurised milk cheese	<i>L.monocytogenes</i> 153	Cheese	Seeding 48h 4°C	2-5-1-3-4 (3.0)	+
4309	Bleu d'auvergne au lait pasteurisé	Pasteurised milk cheese	<i>L.innocua</i> Ad657	Cheese	Seeding 48h 4°C	2-2-2-0-1 (1.4)	+
4310	Emmental français au lait pasteurisé	Pasteurised milk cheese	<i>L.innocua</i> Ad657	Cheese	Seeding 48h 4°C	2-2-2-0-1 (1.4)	+
4311	Saint Paulin au lait pasteurisé	Pasteurised milk cheese	<i>L.innocua</i> Ad657	Cheese	Seeding 48h 4°C	2-2-2-0-1 (1.4)	+
4312	Camembert au lait pasteurisé	Pasteurised milk cheese	<i>L.innocua</i> Ad657	Cheese	Seeding 48h 4°C	2-2-2-0-1 (1.4)	+
4313	Bâtonnets crabe	Surimi	<i>L.monocytogenes</i> Ad888	Surimi	Seeding 48h 4°C	4-1-3-1-4 (2.6)	+
4314	Terrine de saumon aneth	Salmon terrine	<i>L.monocytogenes</i> Ad888	Surimi	Seeding 48h 4°C	4-1-3-1-4 (2.6)	+
4315	Rillettes saumon	Salmon rillettes	<i>L.monocytogenes</i> Ad888	Surimi	Seeding 48h 4°C	4-1-3-1-4 (2.6)	+
4316	Rillettes crabe tourteau	Crab rillettes	<i>L.monocytogenes</i> Ad888	Surimi	Seeding 48h 4°C	4-1-3-1-4 (2.6)	+
4317	Rillettes crabe tourteau	Crab rillettes	<i>L.innocua</i> Ad1675	Fish product	Seeding 48h 4°C	0-3-1-2-3 (1.8)	+
4320	Déchet saucisse 1	Waste (pork)	<i>L.innocua</i> Ad1251	Environmental sample (pork)	Seeding 48h 4°C	1-1-2-2-2 (1.6)	+
4321	Déchet saucisse 1	Waste (pork)	<i>L.monocytogenes</i> Ad1255	Environmental sample (pork)	Seeding 48h 4°C	2-1-1-1-1 (1.2)	+
4322	Déchet saucisse 2	Waste (pork)	<i>L.innocua</i> Ad1251	Environmental sample (pork)	Seeding 48h 4°C	1-1-2-2-2 (1.6)	+
4323	Déchet saucisse 2	Waste (pork)	<i>L.monocytogenes</i> Ad1255	Environmental sample (pork)	Seeding 48h 4°C	2-1-1-1-1 (1.2)	-
4324	Déchet porc	Waste (pork)	<i>L.innocua</i> Ad1251	Environmental sample (pork)	Seeding 48h 4°C	1-1-2-2-2 (1.6)	+
4325	Déchet porc	Waste (pork)	<i>L.monocytogenes</i> Ad1255	Environmental sample (pork)	Seeding 48h 4°C	2-1-1-1-1 (1.2)	+
4326	Déchet saucisson	Waste (pork)	<i>L.innocua</i> Ad1251	Environmental sample (pork)	Seeding 48h 4°C	1-1-2-2-2 (1.6)	+
4327	Déchet saucisson	Waste (pork)	<i>L.monocytogenes</i> Ad1255	Environmental sample (pork)	Seeding 48h 4°C	2-1-1-1-1 (1.2)	-
4526	Rocamadour au lait cru	Raw goat's milk cheese	<i>L.monocytogenes</i> Ad613	Cheese	Seeding 48h 4°C	1-0-0-4-0 (1.0)	+
4527	Roquefort au lait cru de brebis	Raw ewe's milk cheese	<i>L.monocytogenes</i> Ad613	Cheese	Seeding 48h 4°C	1-0-0-4-0 (1.0)	+
4528	Tomme des bauges au lait cru	Raw milk cheese	<i>L.monocytogenes</i> Ad613	Cheese	Seeding 48h 4°C	1-0-0-4-0 (1.0)	+

N° Sample	Product (French name)	Product	Artificial contaminations				Global result
			Strain	Origin	Injury protocol	Inoculation level/sample	
4529	Saint Nectaire fermier au lait cru	Raw milk cheese	<i>L.monocytogenes</i> Ad613 / <i>L.welshimeri</i> Ad1667	Cheese / Raw milk cheese	Seeding 48h 4°C	1-0-0-4-0 (1.0)/ 0-3-2-2-0 (1.4)	+
4530	Comte 12 mois au lait cru	Raw milk cheese	<i>L.monocytogenes</i> Ad613 / <i>L.welshimeri</i> Ad1668	Cheese / Raw milk cheese	Seeding 48h 4°C	1-0-0-4-0 (1.0)/ /0-3-2-2-0 (1.4)	+
4531	Beaufort au lait cru	Raw milk cheese	<i>L.monocytogenes</i> Ad613 / <i>L.welshimeri</i> Ad1669	Cheese / Raw milk cheese	Seeding 48h 4°C	1-0-0-4-0 (1.0)/ 0-3-2-2-0 (1.4)	-
4532	Lait fermenté	Fermented milk	<i>L.innocua</i> Ad1786	Cheese / Raw milk cheese	Seeding 48h 4°C	2-3-2-2-1 (2.0)	+
4533	Lait fermenté	Fermented milk	<i>L.monocytogenes</i> Ad665	Raw milk	Seeding 48h 4°C	0-1-1-0-1 (0.6)	+
4534	Lait ribot lait fermenté maigre	Fermented milk	<i>L.innocua</i> Ad1786	Cheese / Raw milk cheese	Seeding 48h 4°C	2-3-2-2-1 (2.0)	+
4535	Lait ribot lait fermenté maigre	Fermented milk	<i>L.monocytogenes</i> Ad665	Raw milk	Seeding 48h 4°C	0-1-1-0-1 (0.6)	+
4536	Lait cru de vache	Raw milk	<i>L.monocytogenes</i> Ad1781 / <i>L.innocua</i> Ad1786	Raw milk	Seeding 48h 4°C	3-1-3-3-2 (2.4) / 2-3-2-2-1 (2.0)	+
4537	Lait ribot	Fermented milk	<i>L.monocytogenes</i> Ad665	Raw milk	Seeding 48h 4°C	0-1-1-0-1 (0.6)	+
4538	Lait fermenté	Fermented milk	<i>L.monocytogenes</i> Ad665	Raw milk	Seeding 48h 4°C	0-1-1-0-1 (0.6)	+
4539	Lait fermenté	Fermented milk	<i>L.monocytogenes</i> Ad1781 / <i>L.innocua</i> Ad1786	Raw milk	Seeding 48h 4°C	3-1-3-3-2 (2.4) / 2-3-2-2-1 (2.0)	+
4541	Salami	Salami	<i>L.monocytogenes</i> Ad267	Pork meat	Seeding 48h 4°C	4-3-2-0-0 (1.8)	+
4542	Jambon de Paris	Ham	<i>L.monocytogenes</i> Ad267	Pork meat	Seeding 48h 4°C	4-3-2-0-0 (1.8)	+
4544	Bacon fumé	Smoked bacon	<i>L.welshimeri</i> Ad1204 / <i>L.monocytogenes</i> Ad267	Pork meat	Seeding 48h 4°C	0-3-2-2-3 (2.0) / 4-3-2-0-0 (1.8)	+
4545	Jambon serrano	Cured ham	<i>L.welshimeri</i> Ad1204 / <i>L.monocytogenes</i> Ad267	Pork meat	Seeding 48h 4°C	0-3-2-2-3 (2.0) / 4-3-2-0-0 (1.8)	+
4740	Champignons à la grecque	Deli salad	<i>L.monocytogenes</i> Ad1719	Vegetables	Seeding 48h 4°C	1-1-2-0-5 (1.8)	+
4741	Tri choux jambon comte	Deli salad	<i>L.monocytogenes</i> Ad1498/ <i>L.innocua</i> Ad1176	Macedoine/Vegetables	Seeding 48h 4°C	1-0-0-0-2 (0.6)/ 1-3-0-0-2 (1.2)	+
4742	Piémontaise	Deli salad	<i>L.monocytogenes</i> Ad1498/ <i>L.innocua</i> Ad1176	Macedoine/Vegetables	Seeding 48h 4°C	1-0-0-0-2 (0.6)/ 1-3-0-0-2 (1.2)	+
4743	Jardinière de légumes et mayonnaise	Deli salad	<i>L.monocytogenes</i> Ad1498/ <i>L.innocua</i> Ad1176	Macedoine/Vegetables	Seeding 48h 4°C	1-0-0-0-2 (0.6)/ 1-3-0-0-2 (1.2)	+
4744	Tartare de tomates	Seasoned tomatoes	<i>L.monocytogenes</i> Ad1498/ <i>L.innocua</i> Ad1176	Macedoine/Vegetables	Seeding 48h 4°C	1-0-0-0-2 (0.6)/ 1-3-0-0-2 (1.2)	+
4745	Carottes râpées assaisonnées	Seasoned grated carrots	<i>L.monocytogenes</i> Ad1498/ <i>L.innocua</i> Ad1176	Macedoine/Vegetables	Seeding 48h 4°C	1-0-0-0-2 (0.6)/ 1-3-0-0-2 (1.2)	+
4746	Religieuse café	Pastry	<i>L.monocytogenes</i> JL2862/ <i>L.innocua</i> Ad644	Ovoproducts/Pastries	Seeding 48h 4°C	1-0-2-3-0 (1.2)/ 1-1-0-2-0 (0.8)	+



N° Sample	Product (French name)	Product	Artificial contaminations				Global result
			Strain	Origin	Injury protocol	Inoculation level/sample	
4747	Pêche melba	Pastry	<i>L.monocytogenes</i> JL2862/ <i>L.innocua</i> Ad644	Ovoproducts/Pastries	Seeding 48h 4°C	1-0-2-3-0 (1.2)/1 -1-0-2-0 (0.8)	+
4748	Tutti frutti	Pastry	<i>L.monocytogenes</i> JL2862/ <i>L.innocua</i> Ad644	Ovoproducts/Pastries	Seeding 48h 4°C	1-0-2-3-0 (1.2)/ 1-1-0-2-0 (0.8)	+
4749	Eclair chocolat	Pastry	<i>L.monocytogenes</i> JL2862/ <i>L.innocua</i> Ad644	Ovoproducts/Pastries	Seeding 48h 4°C	1-0-2-3-0 (1.2)/1 -1-0-2-0 (0.8)	+
4750	Choux caramel	Pastry	<i>L.monocytogenes</i> JL2862	Ovoproducts	Seeding 48h 4°C	1-0-2-3-0 (1.2)	+
4754	Feuilleté au jambon champignons	Ready to reheat	<i>L.monocytogenes</i> 1973/2400 / <i>L.innocua</i> Ad1676	RTR	Seeding 48h 4°C	3-4-1-0-0 (1.6)/ 2-3-1-0-1 (1.40)	+
4755	Friands à la viande	Ready to reheat	<i>L.monocytogenes</i> 1973/2400 / <i>L.innocua</i> Ad1676	RTR	Seeding 48h 4°C	3-4-1-0-0 (1.6)/ 2-3-1-0-1 (1.40)	+
4756	Quiche lorraine	Ready to reheat	<i>L.monocytogenes</i> 1973/2400 / <i>L.innocua</i> Ad1676	RTR	Seeding 48h 4°C	3-4-1-0-0 (1.6)/ 2-3-1-0-1 (1.40)	+
4758	Tarte au tomates	Ready to reheat	<i>L.monocytogenes</i> 1973/2400 / <i>L.innocua</i> Ad1676	RTR	Seeding 48h 4°C	3-4-1-0-0 (1.6)/ 2-3-1-0-1 (1.40)	+
5023	Minis jambon emmental	Ham and cheese sandwich	<i>L.monocytogenes</i> Ad273	Pork meat	Seeding 48h 4°C	1-2-0-0-0 (0.6)	+
5024	Simple et bon jambon emmental	Ham and cheese sandwich	<i>L.monocytogenes</i> Ad273	Pork meat	Seeding 48h 4°C	1-2-0-0-0 (0.6)	-
5030	Sandwich poulet rôti	Chicken sandwich	<i>L.monocytogenes</i> Ad266	Chicken meat	Seeding 48h 4°C	1-0-0-0-0 (0.2)	+
5033	Pizza pate fine jambon fromage	Ham and cheese pizza	<i>L.welshimeri</i> Ad1175/ <i>L.monocytogenes</i> Ad279	Ready to reheat	Seeding 48h 4°C	1-0-0-0-0 (0.2)/ 2-2-1-0-0 (1.0)	+
5231	Sandwich jambon beurre	Ham and butter sandwich	<i>L.monocytogenes</i> Ad273	Pork meat	Seeding 48h 4°C	2-2-2-1-1 (1.6)	+
5232	Sandwich jambon beurre	Ham and butter sandwich	<i>L.monocytogenes</i> Ad273	Pork meat	Seeding 48h 4°C	2-2-2-1-1 (1.6)	+
5953	Lait cru fermier	Raw milk	<i>L.monocytogenes</i> Ad665	Raw milk	Seeding 48h 4°C	3-0-2-0-2 (1.4)	+
5954	Lait cru de vache	Raw milk	<i>L.monocytogenes</i> Ad665	Raw milk	Seeding 48h 4°C	3-0-2-0-2 (1.4)	-
5958	Petit suisse lait pasteurisé	Pasteurised fermented milk	<i>L.monocytogenes</i> Ad610	Milk	Seeding 48h 4°C	4-5-2-4-2 (3.4)	+
5959	Yaourt nature lait pasteurisé	Pasteurised fermented milk	<i>L.monocytogenes</i> Ad610	Milk	Seeding 48h 4°C	4-5-2-4-2 (3.4)	+
5960	Yaourt au lait entier lait pasteurisé	Pasteurised fermented milk	<i>L.monocytogenes</i> Ad610	Milk	Seeding 48h 4°C	4-5-2-4-2 (3.4)	+
5961	Fromage frais lait pasteurisé	Pasteurised fermented milk	<i>L.monocytogenes</i> Ad611	Milk	Seeding 48h 4°C	4-1-2-0-1 (1.6)	+

N° Sample	Product (French name)	Product	Artificial contaminations				Global result
			Strain	Origin	Injury protocol	Inoculation level/sample	
5962	Crème dessert saveur chocolat lait pasteurisé	Dairy based dessert	<i>L.monocytogenes</i> Ad611	Milk	Seeding 48h 4°C	4-1-2-0-1 (1.6)	+
5964	Crevettes décortiquées crues	Raw peeled shrimp	<i>L.monocytogenes</i> Ad299	Seafood	Seeding 48h 4°C	1-1-1-0-0 (0.6)	+
5965	Blanc de calmar	Calmar	<i>L.monocytogenes</i> Ad299	Seafood	Seeding 48h 4°C	1-1-1-0-0 (0.6)	+
5966	Lardons saumon fumé	Smoked salmon	<i>L.monocytogenes</i> Ad1279	Smoked fish	Seeding 48h 4°C	1-1-3-3-2 (2.0)	+
5967	Filets de harengs fumés	Smoked herring	<i>L.monocytogenes</i> Ad1279	Smoked fish	Seeding 48h 4°C	1-1-3-3-2 (2.0)	+
5968	Mini tranche de truite fumée	Smoked trout	<i>L.monocytogenes</i> Ad1279	Smoked fish	Seeding 48h 4°C	1-1-3-3-2 (2.0)	+
5969	Bâtonnets saveur crabe	Surimi	<i>L.monocytogenes</i> Ad2522	Fish	Seeding 48h 4°C	2-3-3-3-4 (3.0)	+
5970	Terrine de saumon aneth	Salmon terrine	<i>L.monocytogenes</i> Ad2522	Fish	Seeding 48h 4°C	2-3-3-3-4 (3.0)	+
5971	Terrine aux saint jacques	Scallops terrine	<i>L.monocytogenes</i> Ad2522	Fish	Seeding 48h 4°C	2-3-3-3-4 (3.0)	+
6762	Saucisse végétale déchet 1	Waste (vegetables)	<i>L.welshimeri</i> Ad1668	Vegetables	Seeding 48h 4°C	2-0-1-2-5 (2.0)	+
6765	Eau process lavage carcasse poulet	Process water	<i>L.innocua</i> Ad1253	Environmental sample	Seeding 48h 4°C	5-2-1-0-4 (2.4)	+
6767	Eau rinçage mélangeur ferments	Rinsing water	<i>L.welshimeri</i> Ad1668	Vegetables	Seeding 48h 4°C	2-0-1-2-5 (2.0)	+
6769	Eau process rinçage robot coupe fabrication appâts	Rinsing water	<i>L.welshimeri</i> Ad642	Fish	Seeding 48h 4°C	3-2-1-3-3 (2.4)	+
6771	Eau rinçage fabrication biscuits	Rinsing water	<i>L.innocua</i> Ad1253	Environmental sample	Seeding 48h 4°C	5-2-1-0-4 (2.4)	+
6773	Eau rinçage fabrication riz cuit	Rinsing water	<i>L.welshimeri</i> Ad1668	Vegetables	Seeding 48h 4°C	2-0-1-2-5 (2.0)	+
6777	Eau process fabrication chipolatas	Process water	<i>L.innocua</i> Ad1253	Environmental sample	Seeding 48h 4°C	5-2-1-0-4 (2.4)	+




**Appendix 6 – Sensitivity study: raw data**  
**(Enrichment step using the Actero™ Listeria Enrichment media)**

**Bold typing : artificially inoculated samples**

**Listeria detection results:**

H-:	characteristic <i>Listeria</i> colonies without halo
H+:	characteristic <i>Listeria</i> colonies with halo
-:	no typical colonies but presence of background microflora
st:	plate without any colony
i:	PCR inhibition
PA:	positive agreement
NA:	negative agreement
ND:	negative deviation
PD:	positive deviation
PPNA:	positive presumptive negative agreement
PPND :	positive presumptive negative deviation
NC:	non characteristic colony on TSYEA
d:	doubtful colony
L.mono:	<i>Listeria monocytogenes</i>
L.welsh:	<i>Listeria welshimeri</i>
L.innoc:	<i>Listeria innocua</i>
L.seeli:	<i>Listeria seeligeri</i>
L.iva:	<i>Listeria ivanovii</i>
NI:	no identification
No result:	not enough biological material on the slide to get a result
(*):	result after subculture in Fraser for 48 h at 37°C
RTE	ready to eat
RTRH	ready to reheat

 Typical colonies observed on O&A plates after 48 h incubation

COMPOSITE FOODS / READY TO EAT AND READY TO REHEAT																																			
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene Listeria -Detection of Listeria spp																				Category	Type					
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene Listeria Multiplex				BACGene Listeria spp.				Confirmation								BACGene Listeria Multiplex						BACGene Listeria spp.				Fraser 1 (48h at 37°C)
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h								
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF																	
3739	Pain surprise Marin	RTE sandwich	-	-	-	-	/	-	-	-	-	-	/	-	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	a			
3985	Saucisson bœuf volaille	Delicatessen	st	st	st	st	/	-	+(33.75)	+(32.58)	+(34.11)	+(32.61)	H+	+	+	+	<i>L.mono</i>	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	-	1	a			
3987	Sandwich thon tomates œufs	RTE sandwich	-	-	-	-	/	-	-	-	-	-	/	-	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	a			
3989	Brin surimi	RTE surimi	H+/H-	+	H+/H-	+	<i>L.mono/L.innoc</i>	+	-	-	-	-	st	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	1	a			
3995	Rillettes de poulet rôti	RTE rillettes	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	a			
4111	Taboulé poisson fumé	RTE tabbouleh	st	-	st	st	/	-	-	-	-	-	/	-	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	a			
4112	Sandwich poulet tomate œuf	Sandwich	H+	+	-	-	<i>L.mono</i>	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	1	a			
4120	Emincés de poulet rôti	RTE chicken meat	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	a			
4121	Sandwich jambon salami emmental	Sandwich	-	st	-	-	/	-	+(35.49)	+(34.65)	+(34.37)	+(32.84)	H+	+	+	+	<i>L.mono</i>	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	-	1	a			
4125	Salade du pêcheur	Salad	H-d (1)	-	-	-	NC	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	a			
4288	Guacamole	Guacamole	st	-	H+	+	<i>L.mono</i>	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	1	a			
4293	Salade camarguaise	Salad	H-	+	H-	+	<i>L.innoc</i>	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	1	a			
4671	Duo saumon sandwich	Salmon sandwich	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	a			
5022	Minis jambon emmental	Ham and cheese sandwich	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	a			
5023	Minis jambon emmental	Ham and cheese sandwich	H+	+	H+	+	<i>L.mono</i>	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	1	a			
5024	Simple et bon jambon emmental	Ham and cheese sandwich	-	-	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	a			
5025	Simple et bon jambon emmental	Ham and cheese sandwich	-	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	a			
5030	Sandwich poulet rôti	Chicken sandwich	H-	+	H-	+	<i>L.welsh</i>	+	+(29.08)	+(31.36)	+(39.42)	+(35.36)	-/H- (*)	+	-	/	<i>L.welsh</i>	No result;+	+	+	PA	+	PA	+	PA	+	PA	+	PA	H-	1	a			
5231	Sandwich jambon beurre	Ham and butter sandwich	H+	+	H+	+	<i>L.mono</i>	+	+(20.68)	+(18.40)	+(21.07)	+(19.10)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	-	1	a			
5232	Sandwich jambon beurre	Ham and butter sandwich	H+	+	H+	+	<i>L.mono</i>	+	+(20.19)	+(16.98)	+(21.50)	+(18.70)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	-	1	a			
3012	Escalope milanaise	Cooked meat	H+	+	H+	+d	<i>L.mono</i>	+	+(29.48)	+(27.23)	+(29.22)	+(26.69)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	-	1	b			
3014	Bol de soupe moulinée	RTR soup	-	st	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	b			
3015	Mélange poulet fresh, tomates cubes, tomates marinées	RTR chicken	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	b			
3978	Sauce	Sauce	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	1	b			
3980	Cordon bleu de dinde	RTR poultry meat	H+	+	H+	+	<i>L.mono</i>	+	+(21.05)	+(20.60)	+(22.32)	+(20.70)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	-	1	b			
3983	Cordon bleu de dinde	RTR poultry meat	-	-	H+	+	<i>L.mono</i>	+	+(22.58)	+(21.91)	+(23.76)	+(21.99)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	-	1	b			

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene Listeria spp.

COMPOSITE FOODS / READY TO EAT AND READY TO REHEAT																																			
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene Listeria -Detection of Listeria spp																				Category	Type					
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene Listeria Multiplex				BACGene Listeria spp.				Confirmation								BACGene Listeria Multiplex						BACGene Listeria spp.				Fraser 1 (48h at 37°C)
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h								
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF																	
3986	Pâte feuilleté beurre	Puff pastry	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	b					
4115	Sauce	Sauce	st	st	st	st	/	-	-	-	+(38.30)/-/(34.42)	+(37.04)/-/(34.42)	st	/	st	/	/	/	-	-	NA	-	NA	-	PPNA	-	PPNA	-	1	b					
4116	Plaque à croissant	RTR croissant	H+	-	H+/H-	+	L.mono/L.welsh	+	+(38.46)	+(36.73)	+(36.87)	+(34.97)	H+	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	1	b					
4127	Paëlla	Paella	-	-	-	-	/	-	-	+(37.16)/+(31.14)/+(30.61)	+(33.02)/+(31.83)/+(33.16)	+(31.20)/+(29.17)/+(28.98)	- (*)	/	- (*)	/	/	/	-	-	NA	-	PPNA	-	PPNA	-	PPNA	-	1	b					
4286	Pâte brisée au beurre	Short pastry	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	b					
4289	Poêlée Pommes de terre	Pre-cooked potatoes	st	st	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	b					
4294	Raviolis	Raviolis	H-	+	H-	+d	L.welsh	+	+(23.85)	+(22.55)	+(25.71)	+(24.54)	H-	+	+	+	L.innoc	No result;+	+	+	PA	+	PA	+	PA	+	PA	1	b						
4754	Feuilleté au jambon champignons	Ready to reheat	H-	+	H-	+	L.innoc	+	+(20.83)	+(21.07)	+(22.37)	+(21.19)	H-	+	+	+	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	H-	1	b					
4755	Friands à la viande	Ready to reheat	H+	+	H+/H-	+	L.mono/L.innoc	+	+(17.95)	+(16.95)	+(18.79)	+(17.34)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	1	b					
4756	Quiche lorraine	Ready to reheat	H+	+	H+/H-	+	L.mono/L.innoc	+	+(17.88)	+(16.61)	+(18.27)	+(17.34)	H+/H-	+/+	+	+	L.mono/L.innoc	+/+	+	+	PA	+	PA	+	PA	+	PA	-	1	b					
4758	Tarte aux tomates	Ready to reheat	H-	+	H-	+	L.innoc	+	+(19.61)	+(18.85)	+(20.29)	+(19.22)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	1	b					
5033	Pizza pate fine jambon fromage	Ham and cheese pizza	st	-	-	-	/	-	+(27.11)	+(28.60)	+(30.37)	+(28.63)	H+	+	-	/	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	-	1	b					
5034	Pizza pate fine jambon fromage	Ham and cheese pizza	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	b					
5036	Pizza pâte fine jambon chèvre	Ham and goat's cheese pizza	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	b					
3013	Mille feuille	Pastry	st	st	st	st	/	-	-	-	-	-	-	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	c					
4188	Eclair vanille	Pastry	H-	+	H-	+	L.innoc	+	+(25.60)	+(25.05)	+(27.27)	+(25.67)	H-	+	+	+	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	-	1	c					
4189	Eclair vanille	Pastry	H+	+	H+	+	L.mono	+	+(25.34)	+(24.32)	+(26.60)	+(24.89)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	1	c					
4190	Millefeuille	Pastry	H-	+	H-	+	L.innoc	+	+(24.23)	+(24.42)	+(26.16)	+(24.72)	H-	+	+	+	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	-	1	c					
4191	Millefeuille	Pastry	H+	+	H+	+	L.mono	+	+(26.45)	+(25.50)	+(27.58)	+(25.90)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	1	c					
4192	Omelette Tortilla nature	Omelette	H+	+	H+	+	L.mono	+	-	-	-	-	st	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	1	c					
4193	Omelette Tortilla nature	Omelette	H+	+	H+	+	L.mono	+	+(21.95)	+(21.46)	+(23.68)	+(22.48)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	1	c					
4194	Omelette tortilla oignons	Omelette	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	c					
4746	Religieuse café	Pastry	H+/H-	+	H+/H-	+	L.mono/L.innoc	+	+(23.78)	+(19.84)	+(21.80)	+(20.89)	H+/H-	+/+	+	+	L.mono/L.innoc	+/No result;+	+	+	PA	+	PA	+	PA	+	PA	-	1	c					
4747	Pêche melba	Pastry	H-	+	H-	+	L.innoc	+	+(22.66)	+(21.02)	+(22.82)	+(21.93)	H+/H-	+/+	+	+	L.mono/L.innoc	+/+	+	+	PA	+	PA	+	PA	+	PA	-	1	c					
4748	Tutti frutti	Pastry	st	st	-	-	/	-	+(22.47)	+(21.12)	+(22.78)	+(22.01)	H+/H-	+/+	+	+	L.mono/L.innoc	+/+	+	+	PD	+	PD	+	PD	+	PD	-	1	c					
4749	Eclair chocolat	Pastry	H+	+	H+/H-	+	L.mono/L.innoc	+	+(26.53)	+(25.27)	+(27.42)	+(28.07)	H+/H-	+/+	+	+	L.mono/L.innoc	+/+	+	+	PA	+	PA	+	PA	+	PA	-	1	c					
4750	Choux caramel	Pastry	st	st	st	st	/	-	+(28.46)	+(26.83)	+(29.50)	+(28.05)	H+	+	-	/	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	-	1	c					
5038	Eclair vanille	Pastry	st	-	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	c					
5039	Eclair chocolat	Pastry	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	c					
5040	Tortilla omelette oignons	Tortilla with onions	st	st	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	c					
5041	Tortilla omelette nature	Tortilla	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	c					
5042	Crème pâtissière	Custard	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	c					
5043	Coupe profiterole	Pastry	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	c					

COMPOSITE FOODS / READY TO EAT AND READY TO REHEAT																															
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1♦						Alternative method: BACGene Listeria -Detection of Listeria spp																						
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene Listeria Multiplex				BACGene Listeria spp.				Confirmation				BACGene Listeria Multiplex				BACGene Listeria spp.				Fraser 1 (48h at 37°C)	Category	Type
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h				
			Result 24h	MALDI-TOF	Result 48h	MALDI-TOF			Reference tests	MALDI-TOF	Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF															
5044	Tartelette fraise avec crème pâtissière	Pastry	st	st	-	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	c	
5045	Coupe bavaroise	Pastry	st	-	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	1	c	

MEAT PRODUCTS																																					
N° Sample	Product (french name)	Product	Reference method:ISO 11290-1/A1*						Alternative method: BACGene Listeria -Detection of Listeria spp																							Category	Type				
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene Listeria Multiplex				BACGene Listeria spp.				Confirmation								BACGene Listeria Multiplex				BACGene Listeria spp.					Fraser 1 (48h at 37°C)			
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h										
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF																			
3007	Trime abime silver skinne	Meat product	st	st	st	st	/	-	+(37.44)	+(35.39)	+(38.27)	+(34.51)	H+	+	+d	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	a
3009	Lardons fumés	Meat product	H-d(1)	+(2)	H-	+	L.welsh	+	+(33.30)	+(31.23)	+(33.18)	+(31.33)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	a
3010	Gésiers	Meat product	H+	+	H+	+	L.mono	+	+(30.59)	+(28.29)	+(31.12)	+(27.79)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	a
3011	Paupiette	Meat product	-	-	-	-	/	-	+(29.01)	+(27.26)	+(29.24)	+(26.58)	H-	+	+	+	L.innoc	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	a
3722	VSM Poulet	Chicken meat	H-	-	H-	+	L.innoc	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	2	a		
3723	Escalope dinde crue	Poultry meat	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	a		
3724	Filet de poulet	Chicken meat	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	a		
3726	Filet dinde	Poultry meat	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	a		
3735	Viande hachée	Ground beef	-	-	H-d	+d	NC	-	+(27.80)	+(26.53)	+(31.50)	+(26.75)	H-	+	+1	+	L.welsh	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	a		
3736	Viande poulet	Chicken meat	H+/H-	+	H+/H-	+	L.mono/L.welsh	+	+(33.96)	+(30.34)	+(32.71)	+(29.95)	H-/H+	+/+	-	/	L.welsh/L.mono	+/+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	a		
4109	Escalope de dinde	Poultry meat	H-	+	H-	+	L.welsh	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	2	a		
4117	Suprême poulet	Chicken meat	H+	-	H+	+	L.mono	+	+(31.29)	+(30.06)	+(30.65)	+(29.82)	H+	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	a		
4118	Cuisse de poule	Poultry meat	H+	-	H+	+	L.mono	+	+(28.69)	+(26.07)	+(27.39)	+(26.12)	H-	+	-	/	L.innoc at 72h	No result;+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	a		
4128	Haché d'agneau	Lamb meat	H+	-	H+/H-	+	L.mono/L.welsh	+	+(36.54)	+(32.19)	+(34.29)	+(33.26)	H+/H-	+/+	-	/	L.mono/L.welsh	+/+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	a		
6840	Côte à griller	Raw meat (beef)	st	-	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	a		
6841	Pavés de veau	Raw meat (veal)	st	st	-	st	/	-	+(22.35)	+(23.33)	+(26.09)	+(24.73)	H+	+	+	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	a		
6842	Côtes de porc	Raw meat (pork)	st	-	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	a		
6843	Effeillés de charolais	Raw meat (beef)	st	-	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	a		
6844	Steak haché	Raw meat (beef)	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	a		
6845	Agneau sauté	Raw meat (lamb)	-	-	st	-	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	a		
7046	Steak haché 15%MG	Ground beef	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	a		
3737	Côte de porc Miel moutarde	Seasoned pork meat	st	st	-	st	/	-	+(28.28)	+(27.21)	+(29.02)	+(27.05)	H+	+	+1	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	b		
3994	Blanquette	RTR Blanquette	H-	+	H-	+	L.innoc	+	+(19.72)	+(19.19)	+(20.67)	+(19.45)	H+/H-	+/+	-	/	L.mono/L.innoc	+/+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	b		
4114	Côte de porc thym romarin	Meat based products ready to reheat	H+	+	H+	+	L.mono	+	+(31.20)	+(30.27)	+(31.18)	+(30.11)	H+	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	b		
4124	Côte de porc thym romarin	Meat based products ready to reheat	-	-	-	-	/	-	+(33.42)	+(31.01)	+(31.98)	+(30.46)	H-/H+	+/+	-	/	L.mono/L.welsh	+/+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	b		
4195	Coq au vin	Meat based products ready to reheat	H+	+	H+	+	L.mono	+	+(25.40)	+(24.46)	+(27.62)	+(26.21)	H+	+	+	No result;+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	b		
4196	Porc sauce aigre douce	Meat based products ready to reheat	H-	+	H-	+	L.welsh	+	+(26.61)	+(25.62)	+(28.82)	+(27.50)	H-	+	+	+	L.welsh	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	b		
4197	Porc sauce aigre douce	Meat based products ready to reheat	st	st	st	st	/	-	+(24.72)	+(24.69)	+(26.61)	+(25.88)	H-	+	+	+	L.innoc	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	b		
4198	Fricadelles sauce tomate	Meat based products ready to reheat	st	st	st	st	/	-	+(26.00)	+(24.74)	+(27.19)	+(25.55)	H-	+	+	+	L.welsh	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	b		

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene Listeria spp.

MEAT PRODUCTS																																	
N° Sample	Product (french name)	Product	Reference method:ISO 11290-1/A1*						Alternative method: BACGene Listeria -Detection of Listeria spp																			Category	Type				
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene Listeria Multiplex				BACGene Listeria spp.				Confirmation				BACGene Listeria Multiplex				BACGene Listeria spp.					Fraser 1 (48h at 37°C)			
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h						
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF															
4199	Fricadelles sauce tomate	Meat based products ready to reheat	H-	+	H-	+	L.innoc	+	+(21.35)	+(20.78)	+(22.71)	+(20.89)	H-	+	+	+	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	b
4200	Bœuf aux oignons	Meat based products ready to reheat	H+	+	H+	+	L.mono	+	-	-	-	-	st	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	2	b
4201	Bœuf aux oignons	Meat based products ready to reheat	H-	+	H-	+	L.welsh	+	+(24.16)	+(23.34)	+(25.45)	+(24.35)	H-	+	+	+	L.welsh	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	b
7032	Tomates facies au bœuf	RTRH (tomatoes, beef)	st	st	st	st	/	-	-	+39.77/-/-	-	-	st	/	-	/	/	/	-	-	NA	-	PPNA	-	NA	-	NA	-	NA	-	NA	2	b
7033	Escalope de dinde milanaise	RTRH (turkey)	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	b
7034	Gratin d'endives au jambon	RTRH (Ham, endives)	st	st	st	st	/	-	-	+34.92/-/-	-	-	st	/	-	/	/	/	-	-	NA	-	PPNA	-	NA	-	NA	-	NA	-	NA	2	b
7035	Poulet à la moutarde et au riz	RTRH (Chicken)	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	b
7036	Bœuf à la bolognaise et pâtes	RTRH (Beef, pasta)	st	st	st	-	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	b
7037	Poulet à la crème	RTRH (Chicken)	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	b
7038	Poulet à la tomate et purée de courgettes	RTRH (chicken)	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	b
7039	Porc grillé purée	RTRH (pork)	st	st	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	b
7040	Hachis Parmentier	RTHR (Purée, meat)	st	st	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	b
7041	Petit salé aux lentilles	RTRH (pork)	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	b
3008	Merguez volaille	Merguez	-	-	-	-	/	-	+(33.44)	+(31.92)	+(34.04)	+(31.17)	H-	+	+d	+	L.innoc	No result;+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	c
3725	Saucisse sèche volaille bœuf	Delicatessen	H-d	+d	H-d	+d	NC	-	+(29.72)	+(28.64)	+(30.39)	+(28.77)	H+/H-	+/+	+1	+	L.mono/NC	+/+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	c
3727	Saucisson à l'oignon de Roscoff	Delicatessen	st	-	H-	+	L.innoc	+	+(39.50)	+(35.83)	+(38.12)	+(36.17)	H-	+	-	/	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	c
3992	Rosette	Delicatessen	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	c
3996	Jambon	Ham	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	c
4113	Jambon à l'ancienne	Ham	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	c
4541	Salami	Salami	-	st	-	-	/	-	+(32.31)	+(29.84)	+(39.18)	+(31.37)	H+	+	+	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	c
4542	Jambon de Paris	Ham	st	1+	H+	+	L.mono	+	+(21.46)	+(19.41)	+(32.40)	+(20.21)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	+	PA	2	c
4544	Bacon fumé	Smoked bacon	H+	+	H+/H-	-	L.mono/L.welsh	+	-	-	-	-	st	/	st	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	2	c
4545	Jambon serrano	Cured ham	st	st	st	-	/	-	+(31.24)	+(29.21)	+(24.33)	+(29.80)	H-	+	+	+	L.welsh	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	+	PD	2	c
4679	Fromage de tête aux herbes	Delicatessen	st	st	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	c
4684	Jambon à l'ancienne	Ham	H-d(1)	+(1)	H-	+	L.innoc	+	-	-	-	-	st	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	2	c
7048	Bacon fumé	Smoked bacon	-	st	-	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	c
7049	Terrine de campagne	Pâté	-	st	-	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	c
7050	Salami fumé	Smoked salami	-	st	-	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	2	c

MEAT PRODUCTS																															
N° Sample	Product (french name)	Product	Reference method:ISO 11290-1/A1♦						Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria</i> spp																			Category	Type		
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.				Confirmation				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.					Fraser 1 (48h at 37°C)	
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h				
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF													
7051	Jambon cru	Low moisture ham	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	2	c	
7052	Rillettes	Rillettes	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	2	c	
7053	Mortadelle	Delicatessen	st	st	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	2	c	
7054	Rosette	Mow moisture sausage	st	st	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	2	c	
7055	Jambon de paris	Ham	st	st	-	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	2	c	



MILK AND DAIRY PRODUCTS																														
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria</i> spp																				Category	Type
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.				Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C								Fraser 1 (48h at 37°C)					
			O&A	PALCAM	O&A	PALCAM			BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		Confirmation				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.									
									CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96		Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h		
Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h																	
3016	Petit reblochon au lait cru	Raw milk cheese	-	-	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
3017	Rocamadour AOP lait cru	Raw goat's milk cheese	st	-	-	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
3339	Abondance lait cru	Raw milk cheese	st	st	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
3340	Comte lait cru	Raw milk cheese	st	st	-	-	/	-	+(34.26)	+(32.59)	+(33.86)	+(31.71)	H+	+	-	/	<i>L.mono</i>	+	+	+	PD	+	PD	+	PD	+	PD	-	3	a
3342	Grana padano lait cru	Raw milk cheese	-	-	H+	+	<i>L.mono</i>	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	3	a
3343	Rocamadour lait cru	Raw goat's milk cheese	st	st	-	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
3344	Roquefort lait cru	Raw ewe's milk cheese	st	-	-	-	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
3345	Morbier lait cru	Raw milk cheese	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
3990	Maroilles	Raw milk cheese	st	st	st	st	/	-	+(37.10)	+(36.85)	+(39.88)	+(35.90)	H-	+	+	+	<i>L.innoc</i>	No result;+	+	+	PD	+	PD	+	PD	+	PD	-	3	a
3991	Fromage affiné brebis	Raw ewe's milk cheese	st	st	st	st	/	-	+(35.31)/-/-	-	-	-	-	/	-	/	/	/	-	-	PPNA	-	NA	-	NA	-	NA	-	3	a
3993	Morbier lait cru	Raw milk cheese	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
4526	Rocamadour au lait cru	Raw goat's milk cheese	st	st	H+	+	<i>L.mono</i>	+	-	-	-	-	st	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	3	a
4527	Roquefort au lait cru de brebis	Raw ewe's milk cheese	H+	+	H+	+	<i>L.mono</i>	+	+(36.84)	+(34.60)	+(37.47)	+(35.75)	H+d/H-	+	+	+	NC/ <i>L.innoc</i>	Not tested /+	+	+	PA	+	PA	+	PA	+	PA	-	3	a
4528	Tomme des bauges au lait cru	Raw milk cheese	H+(1)	+(1)	H+	+	<i>L.mono</i>	+	+(37.15)	+(38.39)	+(39.99)	+(36.04)	H-	+	-	/	<i>L.innoc</i>	+	+	+	PA	+	PA	+	PA	+	PA	-	3	a
4529	Saint Nectaire fermier au lait cru	Raw milk cheese	-	-	-	-	/	-	+(31.25)	+(29.27)	+(31.69)	+(30.07)	H+	+	-	/	<i>L.mono</i>	+	+	+	PD	+	PD	+	PD	+	PD	-	3	a
4530	Comte 12 mois au lait cru	Raw milk cheese	H-(2)	+(1)	H-	+	<i>L.welsh</i>	+	+(38.35)	+(37.25)	+(40.61)	+(40.12)	H-	+	-	/	<i>L.welsh</i>	+	+	+	PA	+	PA	+	PA	+	PA	-	3	a
4531	Beaufort au lait cru	Raw milk cheese	-	-	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	H-	3	a
5945	Brie de Meaux lait cru	Raw milk cheese	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
5946	Comté lait cru	Raw milk cheese	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
5947	Saint Nectaire lait cru	Raw milk cheese	-	-	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
5948	Roquefort lait cru	Raw ewe's milk cheese	st	-	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
5949	Crottin chavignol lait cru	Raw goat's milk cheese	-	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
5950	Picodon lait cru	Raw goat's milk cheese	st	st	-	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
5951	Salers lait cru	Raw milk cheese	-	-	st	-	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	a
5952	Munster lait cru	Raw milk cheese	H-	+	H-	+	<i>L.innoc</i>	+	+(22.02)	+(20.22)	+(22.74)	+(21.49)	H-	+	+	+	<i>L.innoc</i>	+	+	+	PA	+	PA	+	PA	+	PA	-	3	a
3018	Lait cru	Raw milk	st	st	st	st	/	-	-	-	-	-	-	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	3	b
3019	Lait cru fermier	Raw milk	st	-	-	-	/	-	-	-	-	-	H-d	Not tested	-	/	NC	Not tested	-	-	NA	-	NA	-	NA	-	NA	-	3	b
3346	Crème au lait cru 1	Raw milk cream	H+	+	H+	+	<i>L.mono</i>	+	+(27.51)	+(25.50)	+(26.98)	+(24.87)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	-	3	b
3347	Crème au lait cru 2	Raw milk cream	H+	+	H+	+	<i>L.mono</i>	+	+(25.96)	+(24.06)	+(25.84)	+(23.72)	H+ (RLM - iva)	+	+	+	<i>L.mono/L.iva</i> at 72h	+	+	+	PA	+	PA	+	PA	+	PA	-	3	b

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.



MILK AND DAIRY PRODUCTS																																					
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria</i> spp																				Category	Type							
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		Confirmation						BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.				Fraser 1 (48h at 37°C)										
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx		Agreement AriaMx Ref/Alt 18h									
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF																			
3348	Crème au lait cru 6	Raw milk cream	H+(4)	+	H+/H-	+	<i>L.mono/L.innoc</i>	+	+ (28.48)	+ (26.71)	+ (28.20)	+ (26.25)	H+ (RLM - iva)	+	+	+	+	<i>L.mono/L.iva</i> at 72h	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	b
3745	Lait brebis	Raw ewe's milk	H+	-	H+	+	<i>L.mono</i>	+	+ (34.53)	+ (33.32)	+ (33.78)	+ (32.20)	H+	+	-	/	<i>L.mono</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	b	
3997	Lait brebis	Raw ewe's milk	st	-	st	-	/	-	-	-	-	-	st	/	-	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	3	b
4532	Lait fermenté	Fermented milk	H-	+	H-	+	<i>L.innoc</i>	+	+ (19.65)	+ (17.25)	+ (19.81)	+ (18.76)	H-	+	+	+	<i>L.innoc</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	b
4533	Lait fermenté	Fermented milk	H+	+	H+	+	<i>L.mono</i>	+	+ (24.10)	+ (21.67)	+ (24.34)	+ (22.43)	H+/H-	+/+	+	+	<i>L.mono/L.innoc</i>	+/+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	b
4534	Lait ribot lait fermenté maigre	Fermented milk	H-	+	H-	+	<i>L.innoc</i>	+	+ (23.02)	+ (21.06)	+ (23.17)	+ (21.78)	H-	+	+	+	<i>L.innoc</i>	No result;+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	b
4535	Lait ribot lait fermenté maigre	Fermented milk	H+	+	H+	+	<i>L.mono</i>	+	+ (31.06)	+ (29.01)	+ (31.24)	+ (29.57)	H+/H-	+/+	+	+	<i>L.mono/L.innoc</i>	+/+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	b
4536	Lait cru de vache	Raw milk	H+	+	H+	+	<i>L.mono</i>	+	+ (30.79)	+ (28.99)	+ (30.97)	+ (29.44)	H+/H-	+/+	+	+	<i>L.mono/L.innoc</i>	+/+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	b
4537	Lait ribot	Fermented milk	H+	+	H+	+	<i>L.mono</i>	+	-	-	-	-	st	/	st	/	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	3	b
4538	Lait fermenté	Fermented milk	H+	+	H+	+	<i>L.mono</i>	+	+ (24.86)	+ (22.69)	+ (25.17)	+ (23.50)	H+	+	+	+	<i>L.mono</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	b
4539	Lait fermenté	Fermented milk	H+/H-	+	H+/H-	+	<i>L.mono/L.innoc</i>	+	+ (22.72)	+ (20.63)	+ (22.97)	+ (21.37)	H+/H-	+/+	+	+	<i>L.mono/L.innoc</i>	+/No result;+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	b
5953	Lait cru fermier	Raw milk	H+	+	H+	+	<i>L.mono</i>	+	+ (26.72)	+ (24.15)	+ (27.97)	+ (25.93)	H+	+	-	/	<i>L.mono</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	b
5954	Lait cru de vache	Raw milk	-	-	-	-	/	-	-	+ (35.83)/ + (39.08)/-	-	+ (37.91)/ -/	-	/	-	/	/	/	-	-	NA	-	PPNA	-	NA	-	PPNA	-	NA	-	PPNA	-	NA	-	3	b	
6836	lait cru	Raw milk	-	-	-	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	3	b	
6837	Lait cru fermier	Raw milk	st	-	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	3	b	
6838	Beurre de baratte au lait cru	Raw milk butter	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	3	b	
6839	Beurre de baratte cru demi-sel	Raw milk butter	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	3	b	
3006	Beurre	Butter	H-d	-	-	-	NC	-	+ (30.18)	+ (28.29)	+ (30.00)	+ (27.46)	H-d/ H+ (*)	Not tested/+	-	/	<i>L.mono/L.seeli</i> at 72h	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	H+	3	c	
3349	Bleu des causses lait pasteurisé	Pasteurised milk cheese	st	-	st	-	/	-	+ (38.15)	+ (36.20)	+ (39.10)	+ (35.84)	H-d	+	+d	+	<i>L.seeli</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	c
4306	Brique brebis au lait pasteurisé	Pasteurised ewe's milk cheese	H+	+	H+	+	<i>L.mono</i>	+	+ (21.16)	+ (19.16)	+ (21.61)	+ (20.63)	H+	+	+	+	<i>L.mono</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	c
4307	Fromage au lait pasteurisé	Pasteurised milk cheese	H+	+	H+	+	<i>L.mono</i>	+	+ (25.78)	+ (24.19)	+ (27.32)	+ (26.55)	H+	+	+	+	<i>L.mono</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	c
4308	Tomme des Pyrénées au lait pasteurisé	Pasteurised milk cheese	H+	+	H+	+	<i>L.mono</i>	+	+ (20.68)	+ (19.34)	+ (21.35)	+ (20.48)	H+	+	+	+	<i>L.mono</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	c
4309	Bleu d'auvergne au lait pasteurisé	Pasteurised milk cheese	H-(4)	+(2)	H-	+	<i>L.innoc</i>	+	-	+ (36.55)/ -/+ (38.82)	+ (39.18)/ + (39.70)/ + (39.23)	-	- (*)	/	- (*)	/	/	/	-	-	ND	-	PPND	-	PPND	-	ND	-	ND	-	ND	-	ND	-	3	c	
4310	Emmental français au lait pasteurisé	Pasteurised milk cheese	H-	+	H-	+	<i>L.innoc</i>	+	+ (24.90)	+ (23.62)	+ (24.78)	+ (24.48)	H-	+	+	+	<i>L.innoc</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	c
4311	Saint Paulin au lait pasteurisé	Pasteurised milk cheese	H-	+	H-	+	<i>L.innoc</i>	+	+ (21.11)	+ (19.19)	+ (22.68)	+ (21.22)	H-	+	+	+	<i>L.innoc</i>	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	c
4312	Camembert au lait pasteurisé	Pasteurised milk cheese	H-	+	H-	+	<i>L.innoc</i>	+	+ (23.45)	+ (20.65)	+ (23.78)	+ (22.86)	H-	+	+	+	<i>L.innoc</i>	No result;+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	c
4328	Fromage au lait pasteurisé	Pasteurised milk cheese	st	st	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	3	c	
4329	Tomme des Pyrénées au lait pasteurisé	Pasteurised milk cheese	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	NA	-	3	c	
4330	Brique brebis au lait pasteurisé	Pasteurised milk cheese	st	st	st	st	/	-	+ (38.77)	-/+ (37.27)	+ (40.15)	+ (39.00)	-(H+ at 72h)	+ at 72h	-(+ at 72h)	+ at 72h	<i>L.mono</i> at 72h	+ at 72h	+	+	+	+	+	+	+	+	+	+	+	+	+	+	H+	3	c		

MILK AND DAIRY PRODUCTS																																			
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria</i> spp																				Category	Type					
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.				Confirmation								BACGene <i>Listeria</i> Multiplex						BACGene <i>Listeria</i> spp.				Fraser 1 (48h at 37°C)
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h								
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF																	
4331	Camembert au lait pasteurisé	Pasteurised milk cheese	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	3	c			
4332	Saint Paulin au lait pasteurisé	Pasteurised milk cheese	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	3	c			
5958	Petit suisse lait pasteurisé	Pasteurised fermented milk	H+	+	H+	+	<i>L.mono</i>	+	+ (20.92)	+ (19.25)	+ (24.60)	+ (23.49)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	3	c				
5959	Yaourt nature lait pasteurisé	Pasteurised fermented milk	H+(4)	+(2)	H+	+	<i>L.mono</i>	+	+ (21.24)	+ (19.52)	+ (23.46)	+ (21.96)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	3	c				
5960	Yaourt au lait entier lait pasteurisé	Pasteurised fermented milk	-	-	-	-	/	-	+ (23.13)	+ (21.03)	+ (25.07)	+ (24.12)	H+	+	+	+	<i>L.mono</i>	+	+	+	+	PD	+	PD	+	PD	+	PD	3	c					
5961	Fromage frais lait pasteurisé	Pasteurised fermented milk	-	-	-	-	/	-	+ (22.00)	+ (20.00)	+ (21.91)	+ (21.18)	H+	+	+	+	<i>L.mono</i>	+	+	+	+	PD	+	PD	+	PD	+	PD	3	c					
5962	Crème dessert saveur chocolat lait pasteurisé	Dairy based dessert	H+	+	H+	+	<i>L.mono</i>	+	i/23.55	+ (23.91)	+ (26.84)	+ (29.12)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	3	c						
6671	Fromage trois laits	Pasteurised three milk cheese	-	-	-	-	/	-	+ (40.30)/ + (39.72)/ + (38.93)	-/-	-	-	- (*)	/	-	/	/	/	-	-	PPNA	-	NA	-	NA	-	NA	-	NA	3	c				
6674	Forêt noire	Pastry	H+	+	H+	+	<i>L.mono</i>	+	+ (19.17)	+ (17.41)	+ (18.83)	+ (18.10)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	3	c						
6833	Sauce béchamel au lait entier	Heat treated product	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	3	c				
6834	Crème fraîche d'Isigny	Béchamel sauce	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	3	c				
6835	Panna cotta	Pasteurised dessert (Panna cotta)	st	st	st	-	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	3	c				





VEGETABLES																															
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria</i> spp																				Category	Type	
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.				Confirmation				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.						Fraser 1 (48h at 37°C)
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h				
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF													
6723	Brunoise méridionale	Vegetables preparation	-	-	-	-	/	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	b		
6725	Brunoise méridionale	Vegetables preparation	-	-	-	-	/	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	b		
3746	Piémontaise	Piémontaise	st	st	st	st	/	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c		
4202	Carottes râpées assaisonnées	Seasoned grated carrots	st	st	st	st	/	-	+(31.38)	+(30.08)	+(32.30)	+(31.31)	H+	+	+	+	<i>L.mono</i>	+	+	+	PD	+	PD	+	PD	+	PD	4	c		
4203	Carottes râpées assaisonnées	Seasoned grated carrots	H-d	+(5)	H-	+	<i>L.welsh</i>	+	-	-	-	-	st	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	4	c		
4204	Concombre au fromage blanc et ciboulette	Seasoned cucumber	H+	+	H+	+	<i>L.mono</i>	+	+(27.34)	+(26.41)	+(29.06)	+(27.49)	H+	+	+(1)	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	4	c		
4206	Macédoine de légumes avec mayonnaise	Macédoine	H+	+	H+	+	<i>L.mono</i>	+	+(24.41)	+(23.42)	+(25.39)	+(24.08)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	4	c		
4208	Céleri rémoulade	Grated celery	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c	
4303	Macédoine	Macedoine	st	st	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c	
4740	Champignons à la grecque	Deli salad	H+	+(5)	H+	+	<i>L.mono</i>	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	4	c		
4741	Tri choux jambon comte	Deli salad	st	-	H+	+	<i>L.mono</i>	+	+(19.94)	+(19.57)	+(21.38)	+(21.13)	H-	+	+	+	<i>L.innoc</i>	No result;+	+	+	PA	+	PA	+	PA	+	PA	4	c		
4742	Piémontaise	Deli salad	H-	+	H+/H-	+	<i>L.mono/L.innoc</i>	+	+(18.32)	+(16.79)	+(19.60)	+(18.25)	H-	+	+	+	<i>L.innoc</i>	+	+	+	PA	+	PA	+	PA	+	PA	H-	4	c	
4743	Jardinière de légumes et mayonnaise	Deli salad	H+/H-	+	H-	+	<i>L.mono/L.innoc</i>	+	+(20.82)	+(19.27)	+(21.81)	+(20.45)	H+	+	+	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	4	c		
4744	Tartare de tomates	Seasoned tomatoes	H+/H-	+	H-	+	<i>L.mono/L.innoc</i>	+	+(21.98)	+(21.77)	+(23.36)	+(22.29)	H-	+	+	+	<i>L.innoc</i>	+	+	+	PA	+	PA	+	PA	+	PA	H-	4	c	
4745	Carottes râpées assaisonnées	Seasoned grated carrots	H-	+(1)	H-	+	<i>L.innoc</i>	+	+(24.44)	+(23.22)	+(25.06)	+(23.86)	H+	+	+d	+	<i>L.mono</i>	+	+	+	PA	+	PA	+	PA	+	PA	4	c		
6822	Macédoine de légumes	Vegetables mix	-	st	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c	
6823	Piémontaise jambon	Deli salad	-	-	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c	
6824	Piémontaise jambon	Deli salad	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c	
6825	Macédoine de légumes	Vegetables mix	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c	
7042	Céleri rémoulade	RTE vegetables	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c	
7043	Coleslaw	RTE vegetables	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c	
7044	Carottes râpées	RTE vegetables	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c	
7045	Betteraves cuites	RTE vegetables	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	4	c	



SEAFOOD AND FISHERY PRODUCTS																																		
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene Listeria -Detection of Listeria spp																				Category	Type				
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene Listeria Multiplex				BACGene Listeria spp.				Confirmation								BACGene Listeria Multiplex						BACGene Listeria spp.			
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Fraser 1 (48h at 37°C)						
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF																
2996	Filet de Hoki meunière	Fish fillet	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	5	a				
2999	Crevettes grises	Shrimps	-	-	st	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	5	a				
3000	Noix de Saint Jacques	Scallops	H+	+	H+	+	L.mono	+	-	-	-	-	st	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	5	a				
3729	Filet de Hoki meunière	Fish fillet	H-	-	H-	+	L.welsh	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	5	a				
3730	Meunière poisson blanc	Fish fillet	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	5	a				
3981	Tranche pané merlu blanc	RTR fish	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	5	a				
3982	Filet de Panga	Fish fillet	H+	+	H+	+	L.mono	+	+(23.38)	+(22.48)	+(24.36)	+(22.83)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	5	a				
3984	Moules déco cuites	Mussels	H-	st	H-d	st	NC	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	5	a				
4110	Pavé merlu	Fish product	st	st	-	st	/	-	+(39.78)	+(37.33)	+(38.00)	+(36.83)	H+	+	+	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	-	5	a				
4130	Cœur de filet de Merlu blanc du cap	Fish fillet	H+	+	H+	+1	L.mono	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	5	a				
4131	Aile de raie	Fish product	H+	+	H+	+	L.mono	+	+(29.32)	+(26.80)	+(28.81)	+(27.47)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	5	a				
4685	Ailes de raie	Fish fillet	st	st	st	st	/	-	+(28.11)	+(26.36)	+(27.90)	+(27.00)	H+	+	+	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	-	5	a				
4967	Saumon	Salmon fillet	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	5	a				
4968	Colin Alaska	Hake fillet	st	-	-	-	/	-	+(40.62)/ +(39.50)/ +(38.64)	+(37.08)/ +(39.44)/ +(37.39)	-	-	- (*)	/	- (*)	/	/	/	-	-	PPNA	-	PPNA	-	NA	-	NA	-	5	a				
4969	Noix de Saint Jacques	Scallops	st	-	st	st	/	-	+(34.73)	+(33.29)	+(35.68)	+(33.75)	H+(7)	+	+(1)	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	-	5	a				
4970	Pavé poisson blanc	Fish fillet	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	5	a				
4971	Duo saumon	Salmon fillet	-	st	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	5	a				
4972	Filet de Hoki meunière	Fish fillet	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	5	a				
4973	Nacette de saumon cru	Salmon fillet	H+	+	H+	+	L.mono	+	+(23.97)	+(23.01)	+(26.13)	+(24.03)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	5	a				
5790	Chair de saumon	Salmon	-	st	st	-	/	-	+(23.88)	+(21.25)	+(25.10)	+(24.01)	H-	+	+	+	L.welsh	+	+	+	PD	+	PD	+	PD	+	PD	-	5	a				
5791	Poisson Panga	Fish fillet	H+	+	H+/H-	+	L.mono/ L.innoc	+	+(24.31)	+(22.29)	+(24.99)	+(23.86)	H+/H-	+/+	+	+	L.mono/ L.innoc	+/+	+	+	PA	+	PA	+	PA	+	PA	-	5	a				
5801	Poisson blanc tranché nature	White piece of fish	H+	+	H+	+	L.mono	+	-	-	-	-	st	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	5	a				
5802	Filet de cabillaud	Cod fillet	-	-	-	-	/	-	+(40.25)/ +(34.95)/ +(37.75)	+(36.46)/ +(32.14)/ +(32.60)	-	-	- (*)	/	- (*)	/	/	/	-	-	PPNA	-	PPNA	-	NA	-	NA	-	5	a				
5964	Crevettes décortiquées crues	Raw peeled shrimp	-	-	-	-	/	-	+(22.50)	+(20.34)	+(23.82)	+(22.60)	H+	+	+	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	-	5	a				
5965	Blanc de calmar	Calmar	H+	+	H+	+	L.mono	+	+(21.93)	+(20.36)	+(23.47)	+(22.06)	H+	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	5	a				
6618	Poisson blanc	White fish	H+	+	H+	+	L.mono	+	+(23.67)	+(21.19)	+(23.07)	+(20.89)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	5	a				
6729	Saumon atlantique	Salmon	H+	-	H+	+	L.mono	+	+(26.53)	+(24.62)	+(27.21)	+(26.28)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	5	a				
2998	Filet de bar sauce iodée	Seasoned fish	H+	+	H+	+	L.mono	+	+(29.10)	+(27.27)	+(28.88)	+(26.32)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	5	b				
3728	Pulpe saumon fumé	Smoked salmon	H+	+	H+	+	L.mono	+	-	-	-	-	-	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	5	b				
3998	Saumon fumé	Smoked salmon	H+(2)	+(3)	H+	+	L.mono	+	+(26.46)	+(25.64)	+(27.16)	+(25.75)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	-	5	b				
3999	Saumon fumé	Smoked salmon	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	5	b				

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene Listeria spp.

SEAFOOD AND FISHERY PRODUCTS																															
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene Listeria -Detection of Listeria spp																			Category	Type		
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene Listeria Multiplex				BACGene Listeria spp.				Confirmation				BACGene Listeria Multiplex				BACGene Listeria spp.					Fraser 1 (48h at 37°C)	
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h				
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF													
4000	Truite fumée Norvège	Smoked trout	H-	+	H-	+	L.welsh	+	+ (21.34)	+ (20.00)	+ (21.98)	+ (20.32)	H+/H-	+/+	+	+	L.mono/L.welsh	+/+	+	+	PA	+	PA	+	PA	+	PA	+	PA	5	b
4001	Truite fumée Norvège	Smoked trout	H+/H-	+	H+/H-	+	L.mono/L.welsh	+	+ (18.67)	+ (17.62)	+ (18.97)	+ (17.44)	H+/H-	+/+	+	+	L.mono/L.welsh	+/+	+	+	PA	+	PA	+	PA	+	PA	+	PA	5	b
4002	Saumon fumé	Smoked salmon	H-	+	H-	+	L.welsh	+	+ (24.84)	+ (23.72)	+ (25.55)	+ (23.62)	H-	+	+	+	L.welsh	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	5	b
4670	Saumon fumé	Smoked salmon	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	b
4960	Saumon atlantique fumé	Smoked salmon	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	b
4961	Saumon fumé	Smoked salmon	st	st	st	-	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	b
4962	Saumon atlantique fumé	Smoked salmon	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	b
4963	Truite fumée Norvège	Smoked trout	1H+	st	H+	+	L.mono	+	-	-	-	-	st	/	st	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	5	b
4964	Saumon atlantique fumé	Smoked salmon	st	st	H+	+	L.mono	+	-	-	-	-	st	/	st	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	5	b
4965	Truite fumée	Smoked trout	H-	+	H-	+	L.welsh	+	+ (25.29)	+ (24.22)	+ (27.92)	+ (25.30)	H+/H-	+/+	+	+	L.mono/L.welsh	+/+	+	+	PA	+	PA	+	PA	+	PA	+	PA	5	b
4966	Saumon atlantique fumé	Smoked salmon	H+(3)	+(1)	H+	+	L.mono	+	+(39.69)/- +(39.16)	-	+(39.85)/- +(38.73)	-	- (*)	/	- (*)	/	/	/	-	-	PPND	-	ND	-	PPND	-	ND	-	ND	5	b
5966	Lardons saumon fumé	Smoked salmon	H+	+	H+	+	L.mono	+	+ (22.43)	+ (20.95)	+ (22.93)	+ (22.79)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	5	b
5967	Filets de harengs fumés	Smoked herring	H+	+	H+	+	L.mono	+	+ (29.20)	+ (27.98)	+ (29.19)	+ (30.32)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	5	b
6727	Chaire de saumon fumé	Smoked salmon	H+	+	H+	+	L.mono	+	+ (24.86)	+ (22.06)	+ (24.25)	+ (23.16)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	5	b
6731	Bloc saumon fumé	Smoked salmon	H+/H-	+	H+/H-	+	L.mono/L.innoc	+	+ (23.46)	+ (21.64)	+ (25.06)	+ (22.44)	H+/H-	+/+	+	+	L.mono/L.welsh	+/+	+	+	PA	+	PA	+	PA	+	PA	+	PA	5	b
6826	Lardons saumon atlantique	Smoked salmon	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	b
6827	Tranches de truite fumée	Smoked trout	st	-	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	b
6828	Petites tranches de saumon fumé	Smoked salmon	st	-	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	b
6829	Harengs fumés	Smoked herrings	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	b
6830	Harengs fumés	Smoked herrings	H-	+	H-	+	L.innoc	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	b
7047	Saumon fumé	Smoked salmon	st	st	-	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	b
2997	Pané poisson blanc cuit	Breaded fish	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	c
3731	Portion Merlu pané	Fish filet	H-d/ H+d	-	H-d	-	NC	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	c
3732	Filet de colin Fish and chips	RTR Fish	-	-	-	-	/	-	+ (29.35)	+ (27.94)	+ (30.11)	+ (27.91)	H+	+	-	/	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	5	c
3738	Salade du pêcheur	Seafood Salad	-	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	c
3988	Poisson pané	RTR fish	H+d/ H-	+	H+d /H-	+	H+NC/ L.welsh	+	+(39.50)/ +(37.55)/ +(37.71)	+(37.80)/- +38.89	+(38.66)/- /-	+(36.27)/- /-	- (*)	/	- (*)	/	/	/	-	-	PPND	-	PPND	-	PPND	-	PPND	-	PPND	5	c
4122	Pané de poisson blanc cuit	RTR fish product	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	c
4126	Nacette de saumon	RTR Salmon	H+	+	H+	-	L.mono	+	+ (24.08)	+ (22.37)	+ (23.56)	+ (22.10)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	5	c
4129	Pané Hoki	RTR Fish product	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	c
4290	Cœur cabillaud sauce provençale	RTR fish product	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	5	c
4291	Filet merlu sauce vierge	RTR fish product	H+d	-	H+	+	L.mono	+	+ (32.99)	+ (31.13)	+ (34.79)	+ (34.29)	H+(1)	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	5	c

SEAFOOD AND FISHERY PRODUCTS																																
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene Listeria -Detection of Listeria spp																			Category	Type			
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene Listeria Multiplex				BACGene Listeria spp.				Confirmation				BACGene Listeria Multiplex				BACGene Listeria spp.					Fraser 1 (48h at 37°C)		
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h					
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF														
4292	Dos de cabillaud sauce provençale	RTR fish product	st	-	-	-	/	-	+(31.99)	+(30.31)	+(33.21)	+(32.29)	H- (*)	+	-/+ (*)	+	L.innoc	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	H-d	5	c
4295	Hoki pané	RTR fish product	H+	-	H+	+	L.mono	+	+(31.09)	+(29.14)	+(31.98)	+(30.93)	H+	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
4313	Bâtonnets crabe	Surimi	H+	+	H+	+	L.mono	+	+(18.20)	+(16.11)	+(18.50)	i/(17.73) / +(19.21)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
4314	Terrine de saumon aneth	Salmon terrine	H+	+	H+	+	L.mono	+	+(19.64)	+(17.82)	+(20.30)	+(19.58)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
4315	Rillettes saumon	Salmon rillettes	-	-	st	st	/	-	+(19.27)	+(17.79)	+(19.95)	+(20.62)	H+	+	+	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	+	PD		5	c
4316	Rillettes crabe tourteau	Crab rillettes	H+	+	H+	+	L.mono	+	+(19.30)	+(17.98)	+(20.69)	+(19.72)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
4317	Rillettes crabe tourteau	Crab rillettes	H-	+	H-	+	L.innoc	+	+(21.91)	+(19.75)	+(23.12)	+(22.57)	H-	+	+	+	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
5792	Farce de tartare de saumon	Salmon tartar	H-	+	H+/H-	+	L.mono/L.wels	+	+(23.06)	+(21.27)	+(24.77)	+(23.86)	H+	+	+(2)	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
5800	Filet de hoki pané	Breaded fish	H+	+	H+	+	L.mono	+	+(28.84)	+(27.00)	+(29.69)	+(29.19)	H+	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
5803	Américain thon	Sandwich (tuna)	H+	+	H+	+	L.mono	+	+(30.56)	+(29.49)	+(31.27)	+(29.84)	H+	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
5804	Hoki pané	Breaded fish	-	-	-	-	/	-	-	-	-	-	-	-	/	-	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA		5	c
5968	Mini tranche de truite fumée	Smoked trout	H+	+	H+	+	L.mono	+	+(21.81)	+(21.06)	+(23.57)	+(22.71)	H+	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
5969	Bâtonnets saveur crabe	Surimi	-	-	-	-	/	-	+(16.14)	+(14.67)	+(17.69)	+(16.73)	H+	+	+	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	+	PD		5	c
5970	Terrine de saumon aneth	Salmon terrine	H+	+	H+	+	L.mono	+	+(19.16)	+(16.56)	+(22.21)	+(20.25)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
5971	Terrine aux saint jacques	Scallops terrine	H+	+	H+	+	L.mono	+	+(17.98)	+(15.82)	+(18.87)	+(19.71)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
6724	Pommes de terre au thon	Deli salad (tuna, potatoes)	H+	+	H+	+	L.mono	+	+(29.21)	+(26.87)	+(29.43)	+(27.70)	H+	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
6726	Filet de cabillaud au beurre	RTRH fish	H+	+	H+	+	L.mono	+	+(24.45)	+(21.89)	+(23.86)	+(22.79)	H+	+	+	No result;+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
6728	Pavé poisson blanc provençale	RTRH fish	H+/H-	+	H+/H-	+	L.mono/L.innoc	+	+(32.01)	+(29.43)	+(32.50)	+(30.92)	H+d	+	-	/	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
6730	Filet cabillaud au beurre	RTRH fish	H+	+	H+	-	L.mono	+	+(29.48)	+(26.90)	+(29.86)	+(28.02)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
6732	Salade de riz au crabe	Deli salad	H-	+	H-	+	L.welsh	+	+(29.03)	+(26.52)	+(29.31)	+(27.62)	H-d	+	+1	+	L.welsh	+	+	+	PA	+	PA	+	PA	+	PA	+	PA		5	c
6831	Rillettes de saumon	RTE fish (salmon rillettes)	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA		5	c
6832	Saumon fumé citron ciboulette	RTRH (Fish)	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA		5	c



ENVIRONMENTAL SAMPLES																																
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene Listeria -Detection of Listeria spp																				Category	Type		
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene Listeria Multiplex				BACGene Listeria spp.				Actero™ Listeria Enrichment Media for 18 h at 37°C								Fraser 1 (48h at 37°C)							
			O&A	PALCAM	O&A	PALCAM			BACGene Listeria Multiplex		BACGene Listeria spp.		Confirmation				BACGene Listeria Multiplex				BACGene Listeria spp.											
									CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96		Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h				
Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h																			
3352	Déchet poudre de lait	Dust (milk powder)	st	-	-	-	/	-	-/-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	a
3353	Déchet poissons	Dust (fish)	st	-	-	-	/	-	+(37.69)	+(36.35)	+(39.83)	+(37.00)	H-(1)	+	st	/	L.seeli	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	6	a	
4320	Déchet saucisse 1	Waste (pork)	H-	+	H-	+	L.innoc	+	+(17.32)	+(15.65)	+(17.78)	+(17.39)	H-	+	+	+	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	6	a	
4321	Déchet saucisse 1	Waste (pork)	H+	+	H+	+	L.mono	+	+(21.35)	+(19.73)	+(22.20)	+(21.06)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	6	a	
4322	Déchet saucisse 2	Waste (pork)	H-	+	H-	+	L.innoc	+	+(17.32)	+(15.63)	+(18.08)	+(17.33)	H-	+	+	+	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	6	a	
4323	Déchet saucisse 2	Waste (pork)	st	st	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	6	a	
4324	Déchet porc	Waste (pork)	H-	+	H-	+	L.innoc	+	+(17.85)	+(16.37)	+(18.81)	+(17.73)	H-	+	+	+	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	6	a	
4325	Déchet porc	Waste (pork)	H+/H-	+	H+/H-	+	L.mono/L.welsh	+	+(19.99)	+(18.73)	+(20.89)	+(20.04)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	6	a	
4326	Déchet saucisson	Waste (pork)	st	st	st	st	/	-	+(34.40)	+(33.30)	+(36.73)	+(34.66)	H-(4)	+	+	+	L.innoc	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	6	a	
4327	Déchet saucisson	Waste (pork)	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	6	a	
5437	Matières premières à réception	Residues (Fish industry)	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	6	a	
5438	Déchets de sol	Residues (Fish industry)	H-d	-	-	-	NC	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	6	a	
5439	Déchets de sol étéuse	Residues (Fish industry)	H+	+	H+/H-	+	L.mono/L.innoc	+	+(22.88)	+(21.24)	+(23.07)	+(22.24)	H+/H-	+/+	+	+	L.mono/L.innoc	+/+	+	+	PA	+	PA	+	PA	+	PA	+	PA	6	a	
5440	Déchets de sol	Residues (Fish industry)	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	6	a	
5441	Déchets purage	Residues (Fish industry)	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	6	a	
5447	Déchets de sol	Residues (Fish industry)	st	st	H-	+	L.innoc	+	+(32.62)	+(30.96)	+(33.47)	+(31.82)	H+/H-	+/+	+	+	L.mono/L.innoc	+/+	+	+	PA	+	PA	+	PA	+	PA	+	PA	6	a	
6762	Saucisse végétale déchet 1	Waste (vegetables)	-	-	-	-	/	-	+(38.42)	+(36.33)	+(39.61)	+(38.45)	-/H (*)	+	-	/	L.welsh	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	H-	6	a
7027	Saucisse végétale déchet	Waste (vegetables)	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	6	a	
7028	Déchet porc	Waste (pork)	st	st	st	st	/	-	-	+(35.73)/-	-	-	st	/	st	/	/	/	-	-	NA	-	PPNA	-	NA	-	NA	-	NA	6	a	
7029	Déchet saucisse	Waste (pork)	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	6	a	
3354	Eau rinçage pousoir (production saucisson poisson)	Process water (Pork and fish production)	st	st	st	-	/	-	+(28.24)	+(26.51)	+(28.01)	+(25.82)	H+	+	+	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	6	b	
3356	Eau rinçage cutter (production chair saumon)	Process water (fish production)	H+/H-	+	H+/H-	+	L.mono/L.welsh	+	+(23.08)	+(21.80)	+(23.29)	+(21.47)	H-	+	+	+	L.welsh	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	6	b	
4686	Eau de process Fabrication chipolatas	Process water	st	st	st	st	/	-	+(39.84)/+(34.92)	-/-	-	-	- (*)	/	- (*)	/	/	/	-	-	PPNA	-	NA	-	NA	-	NA	-	NA	6	b	
5431	Eau rinçage filets peleuse	Cleaning water (Fish industry)	H+/H-	+	H+/H-	+	L.mono/L.innoc	+	+(26.03)	+(24.47)	+(26.10)	+(24.65)	H+/H-	+/+	+	+/+	L.mono/L.innoc	+/+	+	+	PA	+	PA	+	PA	+	PA	+	PA	6	b	
5432	Eau rampe de dessalage	Process water (Fish industry)	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	6	b	

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene Listeria spp.

ENVIRONMENTAL SAMPLES																																			
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria</i> spp																				Category	Type					
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.				Confirmation								BACGene <i>Listeria</i> Multiplex						BACGene <i>Listeria</i> spp.				Fraser 1 (48h at 37°C)
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h								
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF																	
5433	Eau lave-main	Cleaning water (Fish industry)	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	6	b				
5434	Eau rinçage après décaissage	Cleaning water (Fish industry)	st	st	st	st	/	-	+(39.76)/-/-	-	+(38.58)/-/-	-	st	/	st	/	/	/	/	-	-	PPNA	-	NA	-	PPNA	-	NA	-	6	b				
5435	Eau rinçage bac inox	Cleaning water (Fish industry)	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	6	b				
5436	Eau local taux de sel	Process water (Fish industry)	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	6	b				
6682	Eau parage n°1 (industrie de poissons)	Process water (fish industry)	st	st	st	st	/	-	-/-	+(37.52)/+(37.66)-	-	+(37.16)/+(32.77)/+(35.58)	- (*)	/	st	/	/	/	/	-	-	NA	-	PPNA	-	NA	-	PPNA	-	6	b				
6683	Eau sortie épineuse (industrie de poissons)	Process water (fish industry)	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	6	b				
6684	Eau égout maturation salage (industrie de poissons)	Sewer water (fish industry)	st	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	6	b				
6685	Eau pelease (industrie de poissons)	Process water (fish industry)	st	st	st	st	/	-	+(20.53)	+(18.53)	+(20.22)	+(19.61)	H-	+	-	/	<i>L.innoc</i>	+	+	+	+	PD	+	PD	+	PD	+	PD	-	6	b				
6765	Eau process lavage carcasse poulet	Process water	H-	+	H-	+	<i>L.innoc</i>	+	+(18.42)	+(16.18)	+(18.97)	+(17.70)	H-	+	+	+	<i>L.innoc</i>	+	+	+	+	PA	+	PA	+	PA	+	PA	-	6	b				
6767	Eau rinçage mélangeur ferments	Rinsing water	H-	+	H-	+	<i>L.welsh</i>	+	+(22.10)	+(19.40)	+(23.41)	+(20.61)	H-	+	+	+	<i>L.welsh</i>	+	+	+	+	PA	+	PA	+	PA	+	PA	-	6	b				
6769	Eau process rinçage robot coupe fabrication appâts	Rinsing water	H-	+	H-	+	<i>L.welsh</i>	+	+(17.88)	+(15.48)	+(17.64)	+(16.07)	H-	+	+	+	<i>L.welsh</i>	+	+	+	+	PA	+	PA	+	PA	+	PA	-	6	b				
6771	Eau rinçage fabrication biscuits	Rinsing water	H-	+	H-	+	<i>L.innoc</i>	+	-	-	-	-	st	/	st	/	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	6	b				
6773	Eau rinçage fabrication riz cuit	Rinsing water	-	st	st	st	/	-	+(26.15)	+(23.42)	+(26.13)	+(24.97)	H-	+	+	No result;+	<i>L.welsh</i>	+	+	+	+	PD	+	PD	+	PD	+	PD	-	6	b				
6777	Eau process fabrication chipolatas	Process water	H-	+	H-	+	<i>L.innoc</i>	+	+(20.47)	+(18.48)	+(20.88)	+(20.94)	H-	+	+	+	<i>L.innoc</i>	+	+	+	+	PA	+	PA	+	PA	+	PA	-	6	b				
7025	Eau de process fabrication saucisse végétale	Process water	st	-	-	-	/	-	-	-	-	-	st	/	-	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	6	b				
7026	Eau de rinçage production poisson	Rinsing water	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	6	b				
3357	Lingette planche découpe poisson (thon saumon)	Wipe (fish production)	H-	+	H-	+	<i>L.welsh</i>	+	+(26.53)	+(24.83)	+(27.12)	+(24.66)	H+	+	+	+	<i>L.mono</i>	+	+	+	+	PA	+	PA	+	PA	+	PA	-	6	c				
3358	Lingette lave botte	Wipe (fish production)	H+	+	H+	+	<i>L.mono</i>	+	-	-	-	-	st	/	-	/	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	6	c				

ENVIRONMENTAL SAMPLES																																
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1*						Alternative method: BACGene Listeria -Detection of Listeria spp																				Category	Type		
			Half Fraser		Fraser 1		Identification	L.spp. result	BACGene Listeria Multiplex				BACGene Listeria spp.				Confirmation				BACGene Listeria Multiplex				BACGene Listeria spp.						Fraser 1 (48h at 37°C)	
			O&A	PALCAM	O&A	PALCAM			CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	CFX96 PCR result (Ct)	AriaMx PCR result (Ct)	O&A		PALCAM 48h		After purification step on TSYEA (from O&A or PALCAM)		All confirmatory tests	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h	Final result CFX96	Agreement CFX96 Ref/Alt 18h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h					
													Result 24h	MALDI-TOF	Result 48h	MALDI-TOF	Reference tests	MALDI-TOF														
3359	Lingette bac stockage poisson	Wipe (fish production)	st	st	st	st	/	+	+(24.67)	+(22.98)	+(24.71)	+(22.60)	H+	+	+	+	L.mono	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	-	6	c
3360	Lingette bac stockage épices (production poisson)	Wipe (fish production)	H+	+	H+	+	L.mono	+	+(27.14)	+(25.10)	+(27.05)	+(24.86)	H-	+	+	+	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	-	6	c
3361	Lingette Multivac conditionneuse	Wipe (fish production)	H-	+	H-	+	L.innoc	+	-	-	-	-	st	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	6	c
3362	Lingette Hall techno table production	Wipe (fish production)	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	c
5442	Lingette roue chariot	Wipe (Fish industry)	H-(2)	-	H-	+	L.innoc	+	-	-	-	-	st	/	-	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	6	c
5443	Lingette tapis sortie Boader	Wipe (Fish industry)	H-	+	H-	+	L.innoc	+	+(20.45)	+(18.85)	+(21.27)	+(18.80)	H-	+	+	+	L.innoc	No result;+	+	+	PA	+	PA	+	PA	+	PA	+	PA	-	6	c
5444	Lingette sol frigo	Wipe (Fish industry)	st	st	st	-	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	c
5445	Lingette peau de saumon	Wipe (Fish industry)	H-(4)	+(5)	H-	+	L.innoc	+	-	-	-	-	st	/	st	/	/	/	-	-	ND	-	ND	-	ND	-	ND	-	ND	-	6	c
5446	Lingette paroi surgélation	Wipe (Fish industry)	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	c
5448	Lingette tapis parage après nettoyage	Wipe after cleaning (Fish industry)	H-	+	H-	+	L.innoc	+	+(25.39)	+(23.69)	+(25.79)	+(24.27)	H-	+	+	+	L.innoc	+	+	+	PA	+	PA	+	PA	+	PA	+	PA	-	6	c
5449	Lingette tapis ététeuse après nettoyage	Wipe after cleaning (Fish industry)	st	st	st	-	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	c
5450	Lingette balance après nettoyage	Wipe after cleaning (Fish industry)	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	c
5451	Lingette égout yakitori après nettoyage	Wipe after cleaning (Fish industry)	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	c
5452	Lingette darfresh après nettoyage	Wipe after cleaning (Fish industry)	st	st	-	-	/	-	+(31.18)	+(29.71)	+(31.61)	+(30.51)	H+	+	+	+	L.mono	+	+	+	PD	+	PD	+	PD	+	PD	+	PD	-	6	c
6686	Chiffonnette sol dessale (industrie de poissons)	Wipe (Fish industry)	st	st	st	st	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	c
6687	Chiffonnette fin tapis parage (industrie de poissons)	Wipe (Fish industry)	-	-	-	-	/	-	-	-	-	-	-	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	c
7030	Chiffonnette riz cuit	Wipe	st	st	st	st	/	-	-	-	-	-	st	/	st	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	c
7031	Chiffonnette riz au lait	Wipe	st	st	st	st	/	-	-	-	-	-	st	/	-	/	/	/	-	-	NA	-	NA	-	NA	-	NA	-	NA	-	6	c

COMPOSITE FOODS / READY TO EAT AND READY TO REHEAT																					
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1* <i>Listeria spp.</i> result	Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria spp</i> Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C + 72h at 5°C ± 3°C														Category	Type		
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria spp.</i>		Confirmations				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria spp.</i>					
				CFX96-PCR result	AriaMx-PCR result	CFX96-PCR result	Aria Mx-PCR result	O&A 24h		PALCAM 48h		Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h			Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h
				(Ct)	(Ct)	(Ct)	(Ct)														
3985	Saucisson bœuf volaille	Delicatessen	-	+(34.22)	+(32.81)	+(35.87)	+(33.98)	H+	-	+	PD	+	PD	+	PD	+	PD	1	a		
3989	Brin surimi	RTE surimi	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	1	a		
4112	Sandwich poulet tomate œuf	Sandwich	+	-	-	-	-	-	st	-	ND	-	ND	-	ND	-	ND	1	a		
4121	Sandwich jambon salami emmental	Sandwich	-	+(20.32)	+(19.56)	+(21.09)	+(19.51)	H+	+	+	PD	+	PD	+	PD	+	PD	1	a		
4288	Guacamole	Guacamole	+	-	-	-	-	/	/	-	ND	-	ND	-	ND	-	ND	1	a		
4293	Salade camarguaise	Salad	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	1	a		
5023	Minis jambon emmental	Ham and cheese sandwich	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	1	a		
5024	Simple et bon jambon emmental	Ham and cheese sandwich	-	-	-	-	-	-	-	-	NA	-	NA	-	-	-	-	1	a		
5030	Sandwich poulet rôti	Chicken sandwich	+	+(28.61)	+(27.60)	+(30.55)	+(28.84)	H-	+	+	PA	+	PA	+	PA	+	PA	1	a		
5231	Sandwich jambon beurre	Ham and butter sandwich	+	+(21.60)	+(18.57)	+(20.50)	+(19.32)	H+	+	+	PA	+	PA	+	PA	+	PA	1	a		
5232	Sandwich jambon beurre	Ham and butter sandwich	+	+(22.17)	+(18.81)	+(20.83)	+(18.54)	H+	+	+	PA	+	PA	+	PA	+	PA	1	a		
3012	Escalope milanaise	Cooked meat	+	+(26.36)	+(24.42)	+(24.97)	+(23.17)	H+	+	+	PA	+	PA	+	PA	+	PA	1	b		
3980	Cordon bleu de dinde	RTR poultry meat	+	+(22.16)	+(20.78)	+(22.76)	+(21.49)	H+	+	+	PA	+	PA	+	PA	+	PA	1	b		
3983	Cordon bleu de dinde	RTR poultry meat	+	+(23.59)	+(22.05)	+(24.92)	+(23.46)	H+	-	+	PA	+	PA	+	PA	+	PA	1	b		
4115	Sauce	Sauce	-	-	-	-	-	-	-	-	NA	-	NA	-	NA	-	NA	1	b		
4116	Plaque à croissant	RTR croissant	+	+(27.18)	+(26.70)	+(28.31)	+(27.04)	H+	+d	+	PA	+	PA	+	PA	+	PA	1	b		
4127	Paëlla	Paella	-	-	+(18.87)/ +(20.83)	+(22.10)/ +(21.92)	+(19.07)/ +(19.92)	- (*)	- (*)	-	NA	-	PPNA	-	PPNA	-	PPNA	1	b		
4294	Raviolis	Raviolis	+	+(23.63)	+(21.61)	+(24.48)	+(24.07)	H-	+	+	PA	+	PA	+	PA	+	PA	1	b		
4754	Feuilleté au jambon champignons	Ready to reheat	+	+(20.58)	+(20.00)	+(21.06)	+(19.91)	H-	+	+	PA	+	PA	+	PA	+	PA	1	b		
4755	Friands à la viande	Ready to reheat	+	+(17.04)	+(15.58)	+(17.84)	+(15.89)	H+	+	+	PA	+	PA	+	PA	+	PA	1	b		
4756	Quiche lorraine	Ready to reheat	+	+(17.98)	+(17.44)	+(18.98)	+(17.41)	H+/H-	+	+	PA	+	PA	+	PA	+	PA	1	b		
4758	Tarte au tomates	Ready to reheat	+	+(19.48)	+(18.06)	+(20.13)	+(18.49)	H+	+	+	PA	+	PA	+	PA	+	PA	1	b		
5033	Pizza pate fine jambon fromage	Ham and cheese pizza	-	+(26.83)	+(26.05)	+(28.16)	+(26.65)	H+	+	+	PD	+	PD	+	PD	+	PD	1	b		
4188	Eclair vanille	Pastry	+	+(23.80)	+(21.60)	+(24.04)	+(23.36)	H-	+	+	PA	+	PA	+	PA	+	PA	1	c		
4189	Eclair vanille	Pastry	+	+(22.25)	+(20.24)	+(22.45)	+(21.53)	H+	+	+	PA	+	PA	+	PA	+	PA	1	c		
4190	Millefeuille	Pastry	+	+(21.01)	+(19.42)	+(22.43)	+(20.40)	H-	+	+	PA	+	PA	+	PA	+	PA	1	c		
4191	Millefeuille	Pastry	+	+(22.82)	+(20.46)	+(23.13)	+(21.19)	H+	+	+	PA	+	PA	+	PA	+	PA	1	c		
4192	Omelette Tortilla nature	Omelette	+	-	-	-	-	st	-	-	ND	-	ND	-	ND	-	ND	1	c		
4193	Omelette Tortilla nature	Omelette	+	+(17.25)	+(15.74)	+(17.92)	+(16.61)	H+	+	+	PA	+	PA	+	PA	+	PA	1	c		
4746	Religieuse café	Pastry	+	+(19.80)	+(17.34)	+(19.27)	+(18.58)	H+	+	+	PA	+	PA	+	PA	+	PA	1	c		
4747	Pêche melba	Pastry	+	+(22.00)	+(19.95)	+(22.57)	+(21.48)	H+/H-	+	+	PA	+	PA	+	PA	+	PA	1	c		
4748	Tutti frutti	Pastry	-	+(22.08)	+(20.64)	+(23.22)	+(21.94)	H+/H-	+	+	PD	+	PD	+	PD	+	PD	1	c		
4749	Eclair chocolat	Pastry	+	+(22.46)	+(22.54)	+(28.28)	+(27.91)	H+/H-	+	+	PA	+	PA	+	PA	+	PA	1	c		
4750	Choux caramel	Pastry	-	+(24.31)	+(22.40)	+(25.30)	+(24.71)	H+	+	+	PD	+	PD	+	PD	+	PD	1	c		
5039	Eclair chocolat	Pastry	-	-	-	-	-	-	-	-	NA	-	NA	-	-	-	-	1	c		

\* Analyses performed according to the COFRAC accreditation

MEAT PRODUCTS																			Category	Type
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1* <i>Listeria spp.</i> result	Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria spp</i>																
				Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C + 72 h at 5°C ± 3°C																
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria spp.</i>		Confirmations				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria spp.</i>				
				CFX96-PCR result (Ct)	AriaMx-PCR result (Ct)	CFX96-PCR result (Ct)	Aria Mx-PCR result (Ct)	O&A 24h	PALCAM 48h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h			
3007	Trime abime silver skinne	Meat product	-	+(33.16)	+(30.12)	+(32.44)	+(30.08)	H+	-	+	PD	+	PD	+	PD	+	PD	2	a	
3009	Lardons fumés	Meat product	+	+(32.20)	+(29.50)	+(31.40)	+(29.58)	H+	+	+	PA	+	PA	+	PA	+	PA	2	a	
3010	Gésiers	Meat product	+	+(26.64)	+(24.36)	+(25.82)	+(23.88)	H+	-	+	PA	+	PA	+	PA	+	PA	2	a	
3011	Paupiette	Meat product	-	+(25.69)	+(23.26)	+(25.77)	+(22.86)	H-	+	+	PD	+	PD	+	PD	+	PD	2	a	
3722	VSM Poulet	Chicken meat	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	2	a	
3735	V viande hachée	Ground beef	-	+(22.92)	+(21.89)	+(23.28)	+(21.63)	H-	-	+	PD	+	PD	+	PD	+	PD	2	a	
3736	V viande poulet	Chicken meat	+	+(25.32)	+(24.59)	+(25.93)	+(24.04)	H-/H+	+	+	PA	+	PA	+	PA	+	PA	2	a	
4109	Escalope de dinde	Poultry meat	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	2	a	
4117	Suprême poulet	Chicken meat	+	+(25.23)	+(24.35)	+(29.06)	+(24.74)	H+	+	+	PA	+	PA	+	PA	+	PA	2	a	
4118	Cuisse de poule	Poultry meat	+	+(23.02)	+(22.10)	+(24.18)	+(22.51)	H- ( <i>L.innocua</i> )	+	+	PA	+	PA	+	PA	+	PA	2	a	
4128	Haché d'agneau	Lamb meat	+	+(20.62)	+(19.88)	+(21.57)	+(19.93)	H+	+	+	PA	+	PA	+	PA	+	PA	2	a	
6840	Côte à griller	Raw meat (beef)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	a	
6841	Pavés de veau	Raw meat (veal)	-	+(18.27)	+(15.67)	+(18.91)	+(18.86)	H+	+	+	PD	+	PD	+	PD	+	PD	2	a	
7046	Steak haché 15%MG	Ground beef	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	a	
3737	Côte de porc Miel moutarde	Seasoned pork meat	-	+(24.38)	+(23.44)	+(25.44)	+(23.30)	H+	+	+	PD	+	PD	+	PD	+	PD	2	b	
3994	Blanquette	RTR Blanquette	+	+(25.44)	+(23.80)	+(23.43)	+(22.62)	H+/H-	+	+	PA	+	PA	+	PA	+	PA	2	b	
4114	Côte de porc thym romarin	Meat based products ready to reheat	+	+(21.34)	+(20.89)	+(23.15)	+(21.85)	H+	+	+	PA	+	PA	+	PA	+	PA	2	b	
4124	Côte de porc thym romarin	Meat based products ready to reheat	-	+(19.12)	+(18.03)	+(19.90)	+(18.91)	H+	+	+	PD	+	PD	+	PD	+	PD	2	b	
4195	Coq au vin	Meat based products ready to reheat	+	+(22.08)	+(19.87)	+(21.92)	+(20.07)	H+	+	+	PA	+	PA	+	PA	+	PA	2	b	
4196	Porc sauce aigre douce	Meat based products ready to reheat	+	+(23.26)	+(21.70)	+(24.56)	-/(23.46)/(22.97)	H-	+	+	PA	+	PA	+	PA	+	PA	2	b	
4197	Porc sauce aigre douce	Meat based products ready to reheat	-	+(21.34)	+(20.66)	+(22.01)	+(19.90)	H-	+	+	PD	+	PD	+	PD	+	PD	2	b	
4198	Fricadelles sauce tomate	Meat based products ready to reheat	-	+(22.67)	+(20.84)	+(22.74)	+(27.37)	H-	+	+	PD	+	PD	+	PD	+	PD	2	b	
4199	Fricadelles sauce tomate	Meat based products ready to reheat	+	+(20.60)	+(18.83)	+(21.48)	+(20.48)	H-	+	+	PA	+	PA	+	PA	+	PA	2	b	
4200	Bœuf aux oignons	Meat based products ready to reheat	+	-	+(38.78)/+(38.26)/-	-	-	st (*)	st (*)	-	ND	-	PPND	-	ND	-	ND	2	b	
4201	Bœuf aux oignons	Meat based products ready to reheat	+	+(21.11)	+(18.87)	+(21.41)	+(19.72)	H-	+	+	PA	+	PA	+	PA	+	PA	2	b	
3008	Merguez volaille	Merguez	-	+(31.80)	+(29.82)	+(31.27)	+(28.94)	H-	-	+	PD	+	PD	+	PD	+	PD	2	c	
3725	Saucisse sèche volaille bœuf	Delicatessen	-	+(26.27)	+(25.28)	+(26.98)	+(25.65)	H+	+	+	PD	+	PD	+	PD	+	PD	2	c	
3727	Saucisson à l'oignon de Roscoff	Delicatessen	+	+(34.44)	+(33.17)	+(34.72)	+(32.81)	H-	-	+	PA	+	PA	+	PA	+	PA	2	c	
4541	Salami	Salami	-	+(28.68)	+(28.76)	+(29.34)	+(27.79)	H+	+	+	PD	+	PD	+	PD	+	PD	2	c	
4542	Jambon de Paris	Ham	+	+(17.19)	+(18.17)	+(18.79)	+(17.47)	H+	+	+	PA	+	PA	+	PA	+	PA	2	c	
4544	Bacon fumé	Smoked bacon	+	+(38.55)/+(35.0)/+(35.95)	+(36.79)/+(33.61)/+(34.76)	+(35.67)/+(36.77)/+(37.72)	+(34.89)/+(34.49)/+(34.55)	st (*)	st (*)	-	PPND	-	PPND	-	PPND	-	PPND	2	c	
4545	Jambon serrano	Cured ham	-	+(26.36)	+(26.02)	+(28.00)	+(26.19)	H-/H+	+	+	PD	+	PD	+	PD	+	PD	2	c	
4684	Jambon à l'ancienne	Ham	+	-	-	-	-	st	-	-	ND	-	ND	-	ND	-	ND	2	c	

\* Analyses performed according to the COFRAC accreditation



MILK AND DAIRY PRODUCTS																					
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1* <i>Listeria spp.</i> result	Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria spp</i> Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C + 72 h at 5°C ± 3°C														Category	Type		
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria spp.</i>		Confirmations				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria spp.</i>					
				CFX96-PCR result	AriaMx-PCR result	CFX96-PCR result	Aria Mx-PCR result	O&A 24h		PALCAM 48h		Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h			Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h
				(Ct)	(Ct)	(Ct)	(Ct)	O&A	PALCAM												
3340	Comte lait cru	Raw milk cheese	-	+ (24.82)	+ (21.29)	+ (22.73)	+ (20.84)	H+	+	+	PD	+	PD	+	PD	+	PD	3	a		
3342	Grana padano lait cru	Raw milk cheese	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	3	a		
3990	Maroilles	Raw milk cheese	-	+ (37.17)	+ (36.74)	+ (36.62)	+ (34.64)	H-	-	+	PD	+	PD	+	PD	+	PD	3	a		
3991	Fromage affiné brebis	Raw ewe's milk cheese	-	-	-	-	-	-	-	-	NA	-	NA	-	-	-	-	3	a		
4526	Rocamadour au lait cru	Raw goat's milk cheese	+	-	-	-	-	st	st	-	ND	-	ND	-	ND	-	ND	3	a		
4527	Roquefort au lait cru de brebis	Raw ewe's milk cheese	+	+ (34.59)	+ (33.59)	+ (33.25)	+ (32.53)	H+d/H-	+	+	PA	+	PA	+	PA	+	PA	3	a		
4528	Tomme des bauges au lait cru	Raw milk cheese	+	+ (35.83)	+ (34.79)	+ (36.44)	+ (36.47)	H+d (NC)/H-	-	+	PA	+	PA	+	PA	+	PA	3	a		
4529	Saint Nectaire fermier au lait cru	Raw milk cheese	-	+ (29.90)	+ (29.47)	+ (30.56)	+ (29.62)	H+	+	+	PD	+	PD	+	PD	+	PD	3	a		
4530	Comte 12 mois au lait cru	Raw milk cheese	+	+ (33.97)	+ (33.26)	+ (32.84)	+ (31.36)	H-	-	+	PA	+	PA	+	PA	+	PA	3	a		
5952	Munster lait cru	Raw milk cheese	+	+ (20.07)	+ (18.17)	+ (21.59)	+ (19.81)	H-	+	+	PA	+	PA	+	PA	+	PA	3	a		
3346	Crème au lait cru 1	Raw milk cream	+	+ (24.01)	+ (21.87)	+ (22.82)	+ (20.34)	H+	+	+	PA	+	PA	+	PA	+	PA	3	b		
3347	Crème au lait cru 2	Raw milk cream	+	+ (20.73)	+ (19.30)	+ (20.46)	+ (18.15)	H+ ( <i>L.iva/L.mono</i> )	+	+	PA	+	PA	+	PA	+	PA	3	b		
3348	Crème au lait cru 6	Raw milk cream	+	+ (21.84)	+ (20.90)	+ (22.05)	+ (19.78)	H+ ( <i>L.iva/L.mono</i> )	+	+	PA	+	PA	+	PA	+	PA	3	b		
3745	Lait brebis	Raw ewe's milk	+	+ (30.17)	+ (28.32)	+ (30.70)	+ (29.18)	H+	-	+	PA	+	PA	+	PA	+	PA	3	b		
4532	Lait fermenté	Fermented milk	+	+ (17.06)	+ (16.30)	+ (18.52)	+ (16.72)	H-	+	+	PA	+	PA	+	PA	+	PA	3	b		
4533	Lait fermenté	Fermented milk	+	+ (19.22)	+ (19.66)	+ (21.34)	+ (19.63)	H+	+	+	PA	+	PA	+	PA	+	PA	3	b		
4534	Lait ribot lait fermenté maigre	Fermented milk	+	+ (20.66)	+ (20.12)	+ (21.88)	+ (20.53)	H-	+	+	PA	+	PA	+	PA	+	PA	3	b		
4535	Lait ribot lait fermenté maigre	Fermented milk	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	3	b		
4536	Lait cru de vache	Raw milk	+	+ (26.46)	+ (25.78)	+ (28.09)	+ (26.47)	H+/H-	+	+	PA	+	PA	+	PA	+	PA	3	b		
4537	Lait ribot	Fermented milk	+	+ (37.55)/- /+ (37.56)	- /+ (35.98)	+ (38.60)/ + (38.23)/ + (38.53)	+ (36.72)/ + (35.44)/ + (35.09)	st (*)	st (*)	-	PPND	-	ND	-	PPND	-	PPND	3	b		
4538	Lait fermenté	Fermented milk	+	+ (20.14)	+ (19.37)	+ (21.46)	+ (20.31)	H+	+	+	PA	+	PA	+	PA	+	PA	3	b		
4539	Lait fermenté	Fermented milk	+	+ (19.08)	+ (18.60)	+ (20.57)	+ (18.91)	H+/H-	+	+	PA	+	PA	+	PA	+	PA	3	b		
5953	Lait cru fermier	Raw milk	+	+ (21.08)	+ (19.22)	+ (22.82)	+ (20.39)	H+	+	+	PA	+	PA	+	PA	+	PA	3	b		
5954	Lait cru de vache	Raw milk	-	+ (33.02)	+ (30.33)	+ (33.57)	+ (31.71)	H+	-	+	PD	+	PD	+	PD	+	PD	3	b		
3006	Beurre	Butter	-	+ (26.45)	+ (23.87)	+ (26.02)	+ (23.86)	H-d ( <i>L.seelii</i> )	+	+	PD	+	PD	+	PD	+	PD	3	c		
3349	Bleu des causses lait pasteurisé	Pasteurised milk cheese	-	+ (29.82)	+ (28.61)	+ (29.75)	+ (27.85)	H-	+d	+	PD	+	PD	+	PD	+	PD	3	c		
4306	Brique brebis au lait pasteurisé	Pasteurised ewe's milk cheese	+	+ (19.32)	+ (16.96)	+ (18.81)	+ (18.17)	H+	+	+	PA	+	PA	+	PA	+	PA	3	c		
4307	Fromage au lait pasteurisé	Pasteurised milk cheese	+	+ (19.94)	+ (18.14)	+ (19.81)	+ (19.26)	H+	+	+	PA	+	PA	+	PA	+	PA	3	c		
4308	Tomme des Pyrénées au lait pasteurisé	Pasteurised milk cheese	+	+ (20.29)	+ (18.90)	+ (20.72)	+ (20.62)	H+	+	+	PA	+	PA	+	PA	+	PA	3	c		
4309	Bleu d'auvergne au lait pasteurisé	Pasteurised milk cheese	+	-	-	-	-	st	-	-	ND	-	ND	-	ND	-	ND	3	c		
4310	Emmental français au lait pasteurisé	Pasteurised milk cheese	+	+ (23.16)	+ (21.80)	+ (22.85)	+ (21.93)	H-	+	+	PA	+	PA	+	PA	+	PA	3	c		
4311	Saint Paulin au lait pasteurisé	Pasteurised milk cheese	+	+ (21.21)	+ (19.92)	+ (22.16)	+ (21.53)	H-	+	+	PA	+	PA	+	PA	+	PA	3	c		
4312	Camembert au lait pasteurisé	Pasteurised milk cheese	+	+ (21.40)	+ (18.97)	+ (21.67)	+ (20.62)	H-	+	+	PA	+	PA	+	PA	+	PA	3	c		
4330	Brique brebis au lait pasteurisé	Pasteurised milk cheese	-	+ (32.51)	+ (31.08)	+ (33.05)	+ (33.06)	H+ ( <i>L.mono</i> )	+	+	PD	+	PD	+	PD	+	PD	3	c		

\* Analyses performed according to the COFRAC accreditation

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Summary report (Version 0)

BACGene *Listeria spp.*

MILK AND DAIRY PRODUCTS																					
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1♦ <i>Listeria spp.</i> result	Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria spp</i>														Category	Type		
				Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C + 72 h at 5°C ± 3°C																	
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria spp.</i>		Confirmations				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria spp.</i>					
				CFX96-PCR result	AriaMx-PCR result	CFX96-PCR result	Aria Mx-PCR result	O&A 24h		PALCAM 48h		Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h			Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h
(Ct)	(Ct)	(Ct)	(Ct)																		
4331	Camembert au lait pasteurisé	Pasteurised milk cheese	-														3	c			
4332	Saint Paulin au lait pasteurisé	Pasteurised milk cheese	-														3	c			
5958	Petit suisse lait pasteurisé	Pasteurised fermented milk	+	+(23.36)	+(18.00)	+(25.70)	+(21.88)	H+	+	+	PA	+	PA	+	PA	+	3	c			
5959	Yaourt nature lait pasteurisé	Pasteurised fermented milk	+	+(20.22)	+(17.72)	i/(25.16)	+(22.59)	H+	+	+	PA	+	PA	+	PA	+	3	c			
5960	Yaourt au lait entier lait pasteurisé	Pasteurised fermented milk	-	+(21.50)	+(18.72)	+(22.29)	+(21.56)	H+	+	+	PD	+	PD	+	PD	+	3	c			
5961	Fromage frais lait pasteurisé	Pasteurised fermented milk	-	+(20.19)	+(18.54)	+(21.59)	+(20.39)	H+	+	+	PD	+	PD	+	PD	+	3	c			
5962	Crème dessert saveur chocolat lait pasteurisé	Dairy based dessert	+	+(24.98)	+(18.59)	+(24.04)	+(24.06)	H+	+	+	PA	+	PA	+	PA	+	3	c			
6671	Fromage trois laits	Pasteurised three milk cheese	-	-	-	-	-	-	-	-	NA	-	NA	-	NA	-	3	c			
6674	Forêt noire	Pastry	+	+(16.84)	+(14.52)	+(16.56)	+(17.07)	H+	+	+	PA	+	PA	+	PA	+	3	c			

VEGETABLES																					
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1* <i>Listeria spp.</i> result	Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria spp</i> Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C + 72 h at 25°C ± 3°C														Category	Type		
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria spp.</i>		Confirmations				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria spp.</i>					
				CFX96-PCR result	AriaMx-PCR result	CFX96-PCR result	Aria Mx-PCR result	O&A 24h		PALCAM 48h		Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h			Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h
				(Ct)	(Ct)	(Ct)	(Ct)														
3003	Jeunes carottes surgelées	Carrots	-	+(24.41)	+(21.68)	+(23.95)	+(21.75)	H+	+	+	PD	+	PD	+	PD	+	PD	4	a		
3734	Pousses haricot mungo	Vegetables	+	+(23.31)	+(22.53)	+(23.77)	+(22.10)	H-	+	+	PA	+	PA	+	PA	+	PA	4	a		
3743	Maïs	Corn	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	4	a		
3979	Petits pois	Peas	+	+(17.42)	+(16.93)	+(18.57)	+(16.96)	H-	+	+	PA	+	PA	+	PA	+	PA	4	a		
4302	Grain de maïs	Corn	+	+(35.12)	+(33.44)	+(36.29)	+(35.51)	H+/H- (*)	+	+	PA	+	PA	+	PA	+	PA	4	a		
4305	Pousses de haricots mungo	Vegetables	+	+(22.93)	+(20.75)	+(23.69)	+(22.91)	H-/H+	+	+	PA	+	PA	+	PA	+	PA	4	a		
4676	Brocolis	Broccoli	-	+(20.71)	+(18.96)	+(21.28)	+(20.33)	H+	+	+	PD	+	PD	+	PD	+	PD	4	a		
5797	Champignons	Mushrooms	+	+(20.89)	+(19.98)	+(23.50)	+(21.28)	H+	+	+	PA	+	PA	+	PA	+	PA	4	a		
6607	Haricots verts	Beans	+	+(30.28)	+(28.10)	+(32.58)	+(32.60)	H-	+	+	PA	+	PA	+	PA	+	PA	4	a		
6611	Carottes crues émincées	Sliced carrots	+	+(25.37)	+(23.24)	+(26.67)	+(25.36)	H+	+	+	PA	+	PA	+	PA	+	PA	4	a		
6614	Courgettes	Zucchini	+	+(28.19)	+(25.95)	+(29.61)	+(28.39)	H-	+	+	PA	+	PA	+	PA	+	PA	4	a		
6713	Persil	Parsley	+	+(32.14)	+(29.60)	+(32.74)	+(31.16)	H+	+	+	PA	+	PA	+	PA	+	PA	4	a		
6714	Ciboulette	Chive	+	+(35.41)	+(33.14)	+(37.02)	+(34.35)	H-d	-	+	PA	+	PA	+	PA	+	PA	4	a		
6716	Courgettes en rondelles	Zucchini	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	4	a		
6717	Persil	Parsley	-	+(36.07)	+(32.76)	+(36.57)	+(34.80)	H-d (*)	-	+	PD	+	PD	+	PD	+	PD	4	a		
3740	Tajine de légumes	Pre-cooked vegetables	-	+(39.05)	-/(32.81)/(36.28)	+(36.24)	+(34.81)	H-	-	+	PD	-	NA	+	PD	+	PD	4	b		
3741	Champignons émincés	Pre-cooked mushrooms	-	+(28.15)	+(27.25)	+(28.46)	+(26.77)	H+	+	+	PD	+	PD	+	PD	+	PD	4	b		
4297	Purée de carottes	carrot purée	+	+(14.59)	+(12.81)	+(15.73)	+(14.90)	H+	+	+	PA	+	PA	+	PA	+	PA	4	b		
4299	Tajine	Tajine	+	-	-	-	-	st	-	-	ND	-	ND	-	ND	-	ND	4	b		
4301	Courgettes bio	Zucchini	+	+(32.28)	+(31.03)	+(33.33)	+(32.57)	H+	+	+	PA	+	PA	+	PA	+	PA	4	b		
4680	Oignons pré-frits	Pre-fried onions	+	-	-	-	-	st	-	-	ND	-	ND	-	ND	-	ND	4	b		
4682	Poêlée de pommes de terre précuites	Precooked potatoes	-	-	-	-	-	st	-	-	NA	-	NA	-	NA	-	NA	4	b		
5789	Farce pour wrap	Stuffing for wrap	+	+(24.91)	+(22.21)	+(25.13)	+(23.59)	H+	+	+	PA	+	PA	+	PA	+	PA	4	b		
5793	Julienne de légumes	Sliced vegetables	+	+(18.94)	+(16.64)	+(19.41)	+(17.96)	H+	+	+	PA	+	PA	+	PA	+	PA	4	b		
5796	Préparation provençale	Vegetables based preparation	-	+(40.46)/-/(39.05)	+(38.38)/+(37.85)/+(37.79)	+(40.58)/+(40.57)/+(40.28)	+(38.57)/+(38.09)/+(39.25)	-(*)	-(*)	-	PPNA	-	PPNA	-	PPNA	-	PPNA	4	b		
5798	Petits pois	Beans	+	+(25.38)	+(23.35)	+(25.22)	+(23.76)	H+/H-	+	+	PA	+	PA	+	PA	+	PA	4	b		
6612	Légumes pour potager	Vegetables	-	-	-	-	-	st	st	-	NA	-	NA	-	NA	-	NA	4	b		
6615	Légumes parisienne	Vegetables preparation	-	+(37.68)	+(36.16)	-/-	-/-	H+	st	+	PD	+	PD	+	PD	+	PD	4	b		
6718	Courgettes farcies	RTRH zucchini	+	+(26.04)	+(23.59)	+(26.28)	+(30.54)	H-	+	+	PA	+	PA	+	PA	+	PA	4	b		
6719	Galettes soja tomates	Vegetables RTRH preparation	-	+(28.44)	+(26.63)	+(28.62)	+(27.02)	H+ (*)	-	+	PD	+	PD	+	PD	+	PD	4	b		
6720	Galettes quinoa provençale	Vegetables RTRH preparation	-	+(40.24)	-/-	+(40.16)	-/-	H-d (*)	-	+	PD	-	NA	+	PD	-	NA	4	b		
6721	Galettes soja tomates	Vegetables RTRH preparation	+	+(28.95)	+(26.95)	+(29.09)	+(27.59)	1H+d (L.mono)	+1d	+	PA	+	PA	+	PA	+	PA	4	b		
6722	Galettes boulgour lentilles	Vegetables RTRH preparation	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	4	b		
6723	Brunoise méridionale	Vegetables preparation	-															4	b		
6725	Brunoise méridionale	Vegetables preparation	-															4	b		
3746	Piémontaise	Piémontaise	-															4	c		
4202	Carottes râpées assaisonnées	Seasoned grated carrots	-	+(28.20)	+(26.37)	+(28.55)	+(27.15)	H+	+	+	PD	+	PD	+	PD	+	PD	4	c		
4203	Carottes râpées assaisonnées	Seasoned grated carrots	+	-	-	-	-	st	st	-	ND	-	ND	-	ND	-	ND	4	c		
4204	Concombre au fromage blanc et ciboulette	Seasoned cucumber	+	+(24.38)	+(23.19)	+(24.84)	+(23.47)	H+	+	+	PA	+	PA	+	PA	+	PA	4	c		

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ADRIA

Summary report (Version 0)

BACGene *Listeria spp.*



VEGETABLES																					
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1♦ <i>Listeria spp.</i> result	Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria spp</i> Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C + 72 h at 25°C ± 3°C														Cate- gory	Type		
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria spp.</i>		Confirmations				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria spp.</i>					
				CFX96- PCR result	AriaMx -PCR result	CFX96 -PCR result	Aria Mx- PCR result			Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h				
				(Ct)	(Ct)	(Ct)	(Ct)	O&A 24h	PALCAM 48h												
4206	Macédoine de légumes avec mayonnaise	Macédoine	+	+(20.62)	+(20.13)	+(20.82)	+(19.93)	H+	+	+	PA	+	PA	+	PA	+	PA	4	c		
4208	Céleri rémoulade	Grated celery	-	-	-	-	-	st	-	-	NA	-	NA	-	NA	-	NA	4	c		
4740	Champignons à la grecque	Deli salad	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	4	c		
4741	Tri choux jambon comte	Deli salad	+	+(19.08)	+(19.10)	+(21.22)	+(20.76)	H-	+	+	PA	+	PA	+	PA	+	PA	4	c		
4742	Piémontaise	Deli salad	+	+(18.37)	+(17.07)	+(19.93)	+(19.52)	H-	+	+	PA	+	PA	+	PA	+	PA	4	c		
4743	Jardinière de légumes et mayonnaise	Deli salad	+	+(21.00)	+(19.08)	+(22.16)	+(20.36)	H+	+	+	PA	+	PA	+	PA	+	PA	4	c		
4744	Tartare de tomates	Seasoned tomatoes	+	+(22.05)	+(19.65)	+(23.00)	+(20.72)	H-	+	+	PA	+	PA	+	PA	+	PA	4	c		
4745	Carottes râpées assaisonnées	Seasoned grated carrots	+	+(22.43)	+(20.77)	+(23.03)	+(21.76)	H+	+	+	PA	+	PA	+	PA	+	PA	4	c		

SEAFOOD AND FISHERY PRODUCTS																			Category	Type	
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1* <i>Listeria spp.</i> result	Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria spp</i> Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C + 72 h at 5°C ± 3°C																	
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria spp.</i>		Confirmations				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria spp.</i>					
				CFX96-PCR result	AriaMx-PCR result	CFX96-PCR result	Aria Mx-PCR result	O&A 24h		PALCAM 48h		Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx			Agreement AriaMx Ref/Alt 18h+72h
				(Ct)	(Ct)	(Ct)	(Ct)														
3000	Noix de Saint Jacques	Scallops	+	-	-	-	-	-	-	-	-	-	-	-	-	-	5	a			
3729	Filet de Hoki meunière	Fish fillet	+	-	-	-	-	-	-	-	-	-	-	-	-	-	5	a			
3982	Filet de Panga	Fish fillet	+	+(27.12)	+(24.54)	+(27.26)	+(25.60)	H+	+	+	PA	+	PA	+	PA	+	5	a			
3984	Moules déco cuites	mussels	-	-	-	-	-	-	-	-	NA	-	NA	-	NA	-	5	a			
4110	Pavé merlu	Fish product	-	+(22.86)	+(22.83)	+(24.18)	+(22.72)	H+	+	+	PD	+	PD	+	PD	+	5	a			
4130	Cœur de filet de Merlu blanc du cap	Fish fillet	+	+(38.68)/ +(32.02)/ +(32.92)	+(39.12)/ +(33.32)/ +(32.91)	+(23.64)/ +(34.23)/ +(33.74)	+(37.39)/ +(30.18)/ +(30.98)	- (*)	- (*)	-	PPND	-	PPND	-	PPND	-	5	a			
4131	Aile de raie	Fish product	+	+(17.50)	+(17.12)	+(19.13)	+(17.65)	H+	+	+	PA	+	PA	+	PA	+	5	a			
4685	Ailes de raie	Fish fillet	-	+(22.90)	+(21.96)	+(23.79)	+(22.93)	H+	+	+	PD	+	PD	+	PD	+	5	a			
4968	Colin Alaska	Hake fillet	-	-	-	-	-	-	-	-	NA	-	NA	-	NA	-	5	a			
4969	Noix de saint jacques	Scallops	-	+(29.18)	+(28.72)	+(29.87)	+(28.46)	H+	+	+	PD	+	PD	+	PD	+	5	a			
4973	Nacette de saumon cru	Salmon fillet	+	+(21.93)	+(20.87)	+(23.22)	+(21.55)	H+	+	+	PA	+	PA	+	PA	+	5	a			
5790	Chair de saumon	Salmon	-	+(16.56)	+(14.15)	+(22.26)	+(18.30)	H-	+	+	PD	+	PD	+	PD	+	5	a			
5791	Poisson Panga	Fish fillet	+	+(23.14)	+(21.13)	+(23.97)	+(23.22)	H+/H-	+	+	PA	+	PA	+	PA	+	5	a			
5801	Poisson blanc tranché nature	White piece of fish	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	5	a			
5802	Filet de cabillaud	Cod fillet	-	-	-	-	-	-	-	-	NA	-	NA	-	NA	-	5	a			
5964	Crevettes décortiquées crues	Raw peeled shrimp	-	+(21.98)	+(19.64)	+(22.90)	+(22.72)	H+	+	+	PD	+	PD	+	PD	+	5	a			
5965	Blanc de calmar	Calmar	+	+(20.41)	+(17.97)	+(21.12)	+(19.90)	H+	+	+	PA	+	PA	+	PA	+	5	a			
6618	Poisson blanc	White fish	+	+(25.62)	+(25.19)	+(31.99)	+(29.48)	H+	+	+	PA	+	PA	+	PA	+	5	a			
6729	Saumon atlantique	Salmon	+	+(25.06)	+(23.81)	+(25.57)	+(24.75)	H+	+	+	PA	+	PA	+	PA	+	5	a			
2998	Filet de bar sauce iodée	Seasoned fish	+	+(23.54)	+(20.91)	+(23.15)	+(20.76)	H+	+	+	PA	+	PA	+	PA	+	5	b			
3728	Pulpe saumon fumé	Smoked salmon	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	5	b			
3998	Saumon fumé	Smoked salmon	+	+(28.62)	+(26.71)	+(28.33)	+(26.78)	H+	+	+	PA	+	PA	+	PA	+	5	b			
3999	Saumon fumé	Smoked salmon	-	-	-	-	-	-	st	-	NA	-	NA	-	NA	-	5	b			
4000	Truite fumée Norvège	Smoked trout	+	+(21.73)	+(19.66)	+(21.98)	+(20.26)	H+ni/H-	+	+	PA	+	PA	+	PA	+	5	b			
4001	Truite fumée Norvège	Smoked trout	+	+(19.72)	+(18.16)	+(19.28)	+(17.86)	H+	+	+	PA	+	PA	+	PA	+	5	b			
4002	Saumon fumé	Smoked salmon	+	+(26.44)	+(24.53)	+(23.55)	+(24.65)	H-	+	+	PA	+	PA	+	PA	+	5	b			
4963	Truite fumée Norvège	Smoked trout	+	-	-	-	-	st	st	-	ND	-	ND	-	ND	-	5	b			
4964	Saumon atlantique fumé	Smoked salmon	+	+(36.84)	+(36.07)	+(37.80)	+(37.68)	3H+	1+	+	PA	+	PA	+	PA	+	5	b			
4965	Truite fumée	Smoked trout	+	+(19.70)	+(18.53)	+(21.30)	+(19.61)	H+/H-	+	+	PA	+	PA	+	PA	+	5	b			
4966	Saumon atlantique fumé	Smoked salmon	+	+(38.64)/- +(39.49)	-	+(39.91)/ +(41.32)/ +(38.13)	-	st	st	+	PPND	-	ND	+	PPND	-	5	b			
5966	Lardons saumon fumé	Smoked salmon	+	+(19.35)	+(17.55)	+(21.17)	+(20.09)	H+	+	+	PA	+	PA	+	PA	+	5	b			
5967	Filets de harengs fumés	Smoked herring	+	+(25.90)	+(23.54)	+(27.22)	+(29.36)	H+	+	+	PA	+	PA	+	PA	+	5	b			
6727	Chaire de saumon fumé	Smoked salmon	+	+(18.56)	+(16.43)	+(18.89)	+(17.66)	H+	+	+	PA	+	PA	+	PA	+	5	b			
6731	Bloc saumon fumé	Smoked salmon	+	+(19.35)	+(18.17)	+(19.15)	+(18.05)	H+/H-	+	+	PA	+	PA	+	PA	+	5	b			
6830	Harengs fumés	Smoked herrings	-	-	-	-	-	st	st	-	NA	-	NA	-	NA	-	5	b			
7047	Saumon fumé	Smoked salmon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	b			
3731	Portion Merlu pané	Fish fillet	-	-	+(38.51) /+(40.04)/-	+(39.90)/-	-	- (*)	- (*)	-	NA	-	PPNA	-	PPNA	-	5	c			
3732	Filet de colin Fish and chips	RTR Fish	-	+(28.12)	+(30.83)	+(28.27)	+(26.36)	H+	+	+	PD	+	PD	+	PD	+	5	c			
3988	Poisson pané	RTR fish	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	5	c			
4126	Nacette de saumon	RTR Salmon	+	+(17.45)	+(17.24)	+(18.59)	+(17.17)	H+	+	+	PA	+	PA	+	PA	+	5	c			
4291	Filet merlu sauce vierge	RTR fish product	+	+(31.36)	+(29.13)	+(32.06)	+(31.11)	H+	-	+	PA	+	PA	+	PA	+	5	c			

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Summary report (Version 0)

BACGene *Listeria spp.*

SEAFOOD AND FISHERY PRODUCTS																					
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1* <i>Listeria spp.</i> result	Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria spp</i>														Category	Type		
				Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C + 72 h at 5°C ± 3°C																	
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria spp.</i>		Confirmations				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria spp.</i>					
				CFX96-PCR result	AriaMx-PCR result	CFX96-PCR result	Aria Mx-PCR result	O&A 24h	PALCAM 48h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h				
(Ct)	(Ct)	(Ct)	(Ct)																		
4292	Dos de cabillaud sauce provençale	RTR fish product	-	+(32.59)	+(31.07)	+(33.92)	+(32.98)	-/H- (*)	- (*)	+	PD	+	PD	+	PD	+	PD	5	c		
4295	Hoki pané	RTR fish product	+	+(27.61)	+(25.46)	+(28.04)	+(27.22)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
4313	Bâtonnets crabe	Surimi	+	+(16.10)	+(14.20)	+(15.98)	+(15.40)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
4314	Terrine de saumon aneth	Salmon terrine	+	+(17.67)	+(15.47)	+(17.82)	+(17.20)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
4315	Rillettes saumon	Salmon rillettes	-	+(16.03)	+(14.30)	+(17.06)	+(16.53)	H+	+	+	PD	+	PD	+	PD	+	PD	5	c		
4316	Rillettes crabe tourteau	Crab rillettes	+	+(15.81)	+(13.80)	+(17.12)	+(16.55)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
4317	Rillettes crabe tourteau	Crab rillettes	+	+(18.15)	+(16.28)	+(21.13)	+(19.75)	H-	+	+	PA	+	PA	+	PA	+	PA	5	c		
5792	Farce de tartare de saumon	Salmon tartar	+	+(22.68)	+(19.87)	+(23.57)	+(22.63)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
5800	Filet de hoki pané	Breaded fish	+	+(22.63)	+(20.45)	+(22.85)	+(21.08)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
5803	Américain thon	Sandwich (tuna)	+	+(26.95)	+(24.04)	+(27.12)	+(26.57)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
5968	Mini tranche de truite fumée	Smoked trout	+	+(18.97)	+(16.54)	+(20.90)	+(20.26)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
5969	Bâtonnets saveur crabe	Surimi	-	+(15.47)	+(13.15)	+(16.52)	+(17.40)	H+	+	+	PD	+	PD	+	PD	+	PD	5	c		
5970	Terrine de saumon aneth	Salmon terrine	+	+(15.62)	+(15.22)	+(20.45)	+(19.33)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
5971	Terrine aux saint jacques	Scallops terrine	+	+(16.33)	+(14.27)	+(18.33)	+(17.03)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
6724	Pommes de terre au thon	Deli salad (tuna, potatoes)	+	+(27.88)	+(25.33)	+(28.29)	+(26.69)	H+	-	+	PA	+	PA	+	PA	+	PA	5	c		
6726	Filet de cabillaud au beurre	RTRH fish	+	+(20.09)	+(18.14)	+(20.31)	+(17.91)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
6728	Pavé poisson blanc provençale	RTRH fish	+	+(27.77)	+(25.52)	+(28.25)	+(26.54)	H+	-	+	PA	+	PA	+	PA	+	PA	5	c		
6730	Filet cabillaud au beurre	RTRH fish	+	+(24.00)	+(22.86)	+(23.89)	+(22.27)	H+	+	+	PA	+	PA	+	PA	+	PA	5	c		
6732	Salade de riz au crabe	Deli salad	+	+(26.00)	+(23.88)	+(26.28)	+(25.04)	H-	+	+	PA	+	PA	+	PA	+	PA	5	c		

ENVIRONMENTAL SAMPLES																					
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1* <i>Listeria spp.</i> result	Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria spp</i>														Category	Type		
				Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C + 72 h at 5°C ± 3°C																	
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria spp.</i>		Confirmations				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria spp.</i>					
				CFX96-PCR result	AriaMx-PCR result	CFX96-PCR result	Aria Mx-PCR result	O&A 24h		PALCAM 48h		Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h			Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h
(Ct)	(Ct)	(Ct)	(Ct)																		
3353	Déchet poissons	Dust (fish)	-	+(31.37)	+(30.04)	+(31.29)	+(29.60)	H-	+	+	PD	+	PD	+	PD	+	PD	6	a		
4320	Déchet saucisse 1	Waste (pork)	+	+(16.60)	+(15.41)	+(17.03)	+(15.86)	H-	+	+	PA	+	PA	+	PA	+	PA	6	a		
4321	Déchet saucisse 1	Waste (pork)	+	+(17.04)	+(16.46)	+(18.24)	+(16.43)	H+	+	+	PA	+	PA	+	PA	+	PA	6	a		
4322	Déchet saucisse 2	Waste (pork)	+	+(16.46)	+(15.36)	+(16.45)	+(15.85)	H-	+	+	PA	+	PA	+	PA	+	PA	6	a		
4323	Déchet saucisse 2	Waste (pork)	-															6	a		
4324	Déchet porc	Waste (pork)	+	+(17.39)	+(16.12)	+(18.56)	+(17.29)	H-	+	+	PA	+	PA	+	PA	+	PA	6	a		
4325	Déchet porc	Waste (pork)	+	+(18.10)	+(16.54)	+(19.28)	+(17.65)	H+	+	+	PA	+	PA	+	PA	+	PA	6	a		
4326	Déchet saucisson	Waste (pork)	-	+(35.07)	+(32.34)	+(34.48)	+(33.70)	H-	+	+	PD	+	PD	+	PD	+	PD	6	a		
5438	Déchets de sol	Residues (Fish industry)	-	-	-	-	-	-	-	-	NA	-	NA	-	NA	-	NA	6	a		
5439	Déchets de sol ététeuse	Residues (Fish industry)	+	+(22.03)	+(19.75)	+(23.41)	+(21.31)	H+/H-	+	+	PA	+	PA	+	PA	+	PA	6	a		
5447	Déchets de sol	Residues (Fish industry)	+	+(30.55)	+(28.61)	+(31.96)	+(30.26)	H+	+	+	PA	+	PA	+	PA	+	PA	6	a		
6762	Saucisse végétale déchet 1	Waste (vegetables)	-	+(19.19)	+(16.03)	+(39.33)	+(37.64)	H-	-	+	PD	+	PD	+	PD	+	PD	6	a		
3354	Eau rinçage pousoir (production saucisson poisson)	Process water (Pork and fish production)	-	+(19.52)	+(17.94)	+(19.31)	+(17.45)	H+	+	+	PD	+	PD	+	PD	+	PD	6	b		
3356	Eau rinçage cutter (production chair saumon)	Process water (fish production)	+	+(16.75)	+(15.40)	+(17.09)	+(15.14)	H-	+	+	PA	+	PA	+	PA	+	PA	6	b		
4686	Eau de process Fabrication chipolatas	Process water	-	-	-	-	-	st	-	-	NA	-	NA	-	NA	-	NA	6	b		
5431	Eau rinçage filets peleuse	Cleaning water (Fish industry)	+	+(24.79)	+(21.94)	+(25.09)	+(24.34)	H+	+	+	PA	+	PA	+	PA	+	PA	6	b		
5434	Eau rinçage après décaissage	Cleaning water (Fish industry)	-	-	-	-	-	st	st	-	NA	-	NA	-	NA	-	NA	6	b		
6682	Eau parage n°1 (industrie de poissons)	Process water (fish industry)	-	-	-	+(33.02)/ +(38.55)/ +(38.86)	+(38.59)/ +(35.79)/-	st	st	-	NA	-	NA	-	PPNA	-	PPNA	6	b		
6685	Eau peleuse (industrie de poissons)	Process water (fish industry)	-	+(17.74)	+(15.38)	+(17.25)	+(15.69)	H-	-	+	PD	+	PD	+	PD	+	PD	6	b		
6765	Eau process lavage carcasse poulet	Process water	+	+(16.09)	+(15.24)	+(17.15)	+(16.27)	H-	+	+	PA	+	PA	+	PA	+	PA	6	b		
6767	Eau rinçage mélangeur ferments	Rinsing water	+	+(19.35)	+(17.20)	+(19.75)	+(18.54)	H-	+	+	PA	+	PA	+	PA	+	PA	6	b		
6769	Eau process rinçage robot coupe fabrication appâts	Rinsing water	+	+(14.42)	+(13.00)	+(15.10)	+(13.97)	H-	+	+	PA	+	PA	+	PA	+	PA	6	b		
6771	Eau rinçage fabrication biscuits	Rinsing water	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	6	b		
6773	Eau rinçage fabrication riz cuit	Rinsing water	-	+(20.60)	+(18.88)	+(21.19)	+(19.95)	H-	+	+	PD	+	PD	+	PD	+	PD	6	b		
6777	Eau process fabrication chipolatas	Process water	+	+(17.41)	+(16.51)	+(18.46)	+(17.16)	H-	+	+	PA	+	PA	+	PA	+	PA	6	b		
3357	Lingette planche découpe poisson (thon saumon)	Wipe (fish production)	+	+(23.01)	+(21.65)	+(23.05)	+(20.64)	H+	+	+	PA	+	PA	+	PA	+	PA	6	c		
3358	Lingette lave botte	Wipe (fish production)	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	6	c		
3359	Lingette bac stockage poisson	Wipe (fish production)	+	+(17.42)	+(15.95)	+(17.49)	+(15.21)	H+	+	+	PA	+	PA	+	PA	+	PA	6	c		
3360	Lingette bac stockage épices (production poisson)	Wipe (fish production)	+	+(18.52)	+(17.55)	+(18.58)	+(16.55)	H-	+	+	PA	+	PA	+	PA	+	PA	6	c		
3361	Lingette Multivac conditionneuse	Wipe (fish production)	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	6	c		

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Summary report (Version 0)

BACGene *Listeria spp.*

ENVIRONMENTAL SAMPLES																					
N° Sample	Product (french name)	Product	Reference method: ISO 11290-1/A1♦ <i>Listeria spp.</i> result	Alternative method: BACGene <i>Listeria</i> -Detection of <i>Listeria spp</i> Actero™ <i>Listeria</i> Enrichment Media for 18 h at 37°C + 72 h at 5°C ± 3°C														Category	Type		
				BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria spp.</i>		Confirmations				BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria spp.</i>					
				CFX96-PCR result	AriaMx-PCR result	CFX96-PCR result	Aria Mx-PCR result	O&A 24h		PALCAM 48h		Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h	Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h	Final result 72H CFX96	Agreement CFX96 Ref/Alt 18h +72h			Final result AriaMx	Agreement AriaMx Ref/Alt 18h+72h
				(Ct)	(Ct)	(Ct)	(Ct)														
5442	Lingette roue chariot	Wipe (Fish industry)	+	-	-	-	-	-	-	-	ND	-	ND	-	ND	-	ND	6	c		
5443	Lingette tapis sortie Boader	Wipe (Fish industry)	+	+(18.03)	+(16.10)	+(19.15)	+(20.24)	H-	+	+	PA	+	PA	+	PA	+	PA	6	c		
5445	Lingette peau de saumon	Wipe (Fish industry)	+	-	-	-	-	st	st	-	ND	-	ND	-	ND	-	ND	6	c		
5448	Lingette tapis parage après nettoyage	Wipe after cleaning (Fish industry)	+	+(23.64)	+(21.04)	+(24.29)	+(22.44)	H-	+	+	PA	+	PA	+	PA	+	PA	6	c		
5452	Lingette darfresh après nettoyage	Wipe after cleaning (Fish industry)	-	+(25.22)	+(22.99)	+(25.98)	+(24.37)	H+	+	+	PD	+	PD	+	PD	+	PD	6	c		

**Appendix 7 – Relative level of detection study: raw data  
(Enrichment step using the Actero™ Listeria Enrichment media)**

Matrix : Deli-salad  
Strain : *Listeria monocytogenes* Ad494

Aerobic mesophilic flora: 8.0 10<sup>2</sup> CFU/g

N° sample	Level	Inoculation level (cfu/sample) MPN	Reference method: ISO 11290-1/A1*					Alternative method: BACGene Listeria												
			Half Fraser		Fraser		Final Result	Number positive samples/ Total	Actero™ Listeria Enrichment media for 18h at 37°C											
			O&A	PALCAM	O&A	PALCAM			BACGene Listeria Multiplex		BACGene Listeria spp.		Confirmation		BACGene Listeria Multiplex		BACGene Listeria spp.		Fraser 1 48h	Number positive samples/ Total
							PCR CFX96	PCR AriaMx	PCR CFX96	PCR AriaMx	Tests of the reference method	MALDI-TOF tests	Final result CFX96	Final result AriaMx	Final result CFX96	Final result AriaMx				
5381	0	/	-	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	
5382			-	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	
5383			-	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	
5384			-	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	
5385			-	st	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	
5386	Low	1,1	H+	+	H+	+	+	+(24.82)	+(23.25)	+(25.16)	+(23.41)	+	+	+	+	+	+	+	-	
5387			H+	+	H+	+	+	-	-	-	-	-	/	-	-	-	-	-	-	
5388			H+	+	H+	+	+	-	-	-	-	-	/	-	-	-	-	-	-	
5389			H+	+	H+	+	+	i/+(24.25)	+(22.30)	+(24.25)	+(22.68)	+	+	+	+	+	+	+	+	-
5390			-	-	-	-	-	+(27.19)	+(25.54)	+(27.97)	+(25.88)	+	+	+	+	+	+	+	+	-
5391			-	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-
5392			H+	+	H+	+	+	+(24.21)	+(22.74)	+(24.76)	+(23.09)	+	+	+	+	+	+	+	+	-
5393			H+	+	H+	+	+	+(26.90)	+(25.22)	+(27.18)	+(25.31)	+	+	+	+	+	+	+	+	-
5394			-	st	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	-
5395			H+	+	H+	+	+	+(28.14)	+(25.83)	+(28.55)	+(26.04)	+	+	+	+	+	+	+	+	-
5396			-	-	-	-	-	+(27.23)	+(25.45)	+(27.55)	+(25.69)	+	+	+	+	+	+	+	+	-
5397			H+	+	H+	+	+	+(25.94)	+(23.97)	+(26.16)	+(24.25)	+	+	+	+	+	+	+	+	-
5398			H+	+	H+	+	+	+(25.45)	+(23.63)	+(25.88)	+(24.13)	+	+	+	+	+	+	+	+	-
5399			H+	+	H+	+	+	+(25.74)	+(24.12)	+(26.16)	+(24.65)	+	+	+	+	+	+	+	+	-
5400			-	-	-	-	-	+(24.96)	+(23.33)	+(25.39)	+(23.62)	+	+	+	+	+	+	+	+	-
5401			H+	+	H+	+	+	+(27.53)	+(26.08)	+(28.16)	+(26.38)	+	+	+	+	+	+	+	+	-
5402			-	-	-	-	-	+(27.26)	+(25.55)	+(27.33)	+(25.82)	+	+	+	+	+	+	+	+	-
5403	H+	+	H+	+	+	+(26.71)	+(25.00)	+(27.30)	+(25.52)	+	+	+	+	+	+	+	+	-		
5404	H+	+	H+	+	+	+(27.08)	+(24.91)	+(26.79)	+(24.87)	+	+	+	+	+	+	+	+	-		
5405	H+	+	H+	+	+	i/+(27.48)	+(25.58)	+(27.69)	+(25.90)	+	+	+	+	+	+	+	+	-		
5406	High	3,1	H+	+	H+	+	+	+(24.54)	+(22.85)	+(24.81)	+(23.26)	+	+	+	+	+	+	+	-	
5407			H+	+	H+	+	+	+(24.37)	+(22.54)	+(24.72)	+(23.00)	+	+	+	+	+	+	+	-	
5408			H+	+	H+	+	+	+(22.95)	+(21.31)	+(23.34)	+(21.55)	+	+	+	+	+	+	+	-	
5409			H+	+	H+	+	+	+(23.56)	+(22.17)	+(24.21)	+(22.34)	+	+	+	+	+	+	+	+	-

\* Analyses performed according to the COFRAC accreditation

5410			H+	+	H+	+	+			+(23.26)	+(22.00)	+(23.68)	+(22.19)		+	+	+	+	+	+		
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Matrix : Frankfurters  
 Strain : *Listeria monocytogenes* Ad 669

Aerobic mesophilic flora: 8.1 10<sup>6</sup> CFU/g

N° sample	Level	Inoculation level (cfu/sample) MPN	Reference method: ISO 11290-1/A1*					Alternative method : BACGene <i>Listeria</i>																
			Half Fraser		Fraser		Final Result	Number positive samples/ Total	Actero™ <i>Listeria</i> Enrichment media for 18h at 37°C															
			O&A	PALCAM	O&A	PALCAM			BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		Confirmation		BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		Fraser 1 48h	Number positive samples/ Total				
									PCR CFX96	PCR AriaMx	PCR CFX96	PCR AriaMx	Tests of the reference method	MALDI-TOF tests	Final result CFX96	Final result AriaMx	Final result CFX96	Final result AriaMx						
5497	0	/	st	st	st	st	-	0/5	-	-	-	-	-	-	/	-	-	-	-	-	-	0/5		
5498			st	st	st	st	-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	
5499			st	st	st	st	-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
5500			-	st	st	st	-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
5501			st	st	st	st	-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
5905	Low	0,9	st	st	st	st	-	15/20	+(27.11)	+(25.15)	+(27.74)	+(25.97)	+	+	+	+	+	+	+	+	16/20			
5906			H+	+	H+	+	+		+(23.44)	+(21.78)	+(24.34)	+(22.81)	+	+	+	+	+	+	+	+		+		
5907			st	st	st	st	-		+(25.04)	+(23.40)	+(26.06)	+(23.95)	+	+	+	+	+	+	+	+		+	+	
5908			H+	+	H+	+	+		+(23.77)	+(21.93)	+(24.10)	+(22.46)	+	+	+	+	+	+	+	+		+	+	
5909			H+	+	H+	+	+		+(25.13)	+(23.62)	+(25.84)	+(24.10)	+	+	+	+	+	+	+	+		+	+	
5910			H+	+	H+	+	+		-	-	-	-	-	/	-	-	-	-	-	-		-	-	
5911			H+	+	H+	+	+		+(25.23)	+(24.17)	+(25.78)	+(24.20)	+	+	+	+	+	+	+	+		+	+	
5912			-	st	-	-	-		-	-	-	-	-	/	-	-	-	-	-	-		-	-	
5913			H+	+	H+	+	+		+(24.32)	+(21.94)	+(24.39)	+(22.75)	+	+	+	+	+	+	+	+		+	+	
5914			st	-	st	st	-		+(24.71)	+(22.55)	+(25.26)	+(23.64)	+	+	+	+	+	+	+	+		+	+	
5915			st	st	st	st	-		+(22.80)	+(20.90)	+(23.21)	+(21.27)	+	+	+	+	+	+	+	+		+	+	
5916			H+	+	H+	+	+		+(24.12)	+(22.81)	+(24.83)	+(23.12)	+	+	+	+	+	+	+	+		+	+	
5917			H+	+	H+	+	+		+(23.22)	+(21.527)	+(23.69)	+(21.80)	+	+	+	+	+	+	+	+		+	+	
5918			H+	+	H+	+	+		+(24.07)	+(22.72)	+(24.63)	+(22.76)	+	+	+	+	+	+	+	+		+	+	
5919			H+	+	H+	+	+		+(26.53)	+(25.78)	+(27.15)	+(25.21)	+	+	+	+	+	+	+	+		+	+	
5920			H+	+	H+	+	+		-	-	-	-	-	/	-	-	-	-	-	-		-	-	
5921			H+	+	H+	+	+		-	-	-	-	-	/	-	-	-	-	-	-		-	-	
5922			H+	+	H+	+	+		+(22.80)	+(20.04)	+(22.59)	+(21.13)	+	+	+	+	+	+	+	+		+	+	
5923			H+	+	H+	+	+		+(22.44)	+(20.03)	+(22.23)	+(20.63)	+	+	+	+	+	+	+	+		+	+	
5924			H+	+	H+	+	+		+(26.49)	+(25.02)	+(27.05)	+(25.13)	+	+	+	+	+	+	+	+		+	+	
5522	High	1,8	st	st	st	st	-	4/5	+(26.73)	+(24.83)	+(26.70)	+(24.75)	+	+	+	+	+	+	+	+				
5523			H+	+	H+	+	+		+(26.32)	+(25.57)	+(27.09)	+(25.26)	+	+	+	+	+	+	+	+	+			
5524			H+	+	H+	+	+		+(27.27)	+(26.11)	+(27.65)	+(25.90)	+	+	+	+	+	+	+	+	+			
5525			H+	+	H+	+	+		-	-	-	-	-	/	-	-	-	-	-	-	-			
5526			H+	+	H+	+	+		+(31.47)	+(31.49)	+(32.00)	+(30.69)	+	+	+	+	+	+	+	+	+	+		

\* Analyses performed according to the COFRAC accreditation  
 ADRIA  
 Summary report (Version 0)  
 BACGene *Listeria* spp.



Matrix : Soft white cheese  
 Strain : *Listeria ivanovii* Ad1337

Aerobic mesophilic flora: 9.2 10<sup>5</sup> CFU/g

N° sample	Level	Inoculation level (cfu/sample) MPN	Reference method: ISO 11290-1/A1*					Alternative method : BACGene <i>Listeria</i>												
			Half Fraser		Fraser		Final Result	Number positive samples/ Total	Actero™ <i>Listeria</i> Enrichment media for 18h at 37°C											
			O&A	PALCAM	O&A	PALCAM			BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		Confirmation		BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		Fraser 1 48h	Number positive samples/Total
									PCR CFX96	PCR AriaMx	PCR CFX96	PCR AriaMx	Tests of the reference method	MALDI-TOF tests	Final result CFX96	Final result AriaMx	Final result CFX96	Final result AriaMx		
6144	0	0	st	st	st	-	-	-	-	-	-	/	-	-	-	-	-	-	0/5	
6145			st	st	st	-	-	-	i/-	-	-	/	-	-	-	-	-	-		
6146			st	st	-	-	-	-	-	-	-	/	-	-	-	-	-	-		
6147			st	st	-	-	-	-	-	-	-	/	-	-	-	-	-	-		
6148			st	st	-	-	-	-	-	-	-	/	-	-	-	-	-	-		
6149	Low	1,0	H+	+	H+	+	+	-	-	-	-	/	-	-	-	-	-	-	14/20	
6150			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+		
6151			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+		
6152			st	-	st	-	-	-	-	-	-	/	-	-	-	-	-	-		
6153			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+		
6154			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+		
6155			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+		
6156			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+		
6157			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+		
6158			st	st	st	st	-	-	-	-	-	/	-	-	-	-	-	-		
6159			st	st	st	st	-	-	-	-	-	/	-	-	-	-	-	-		
6160			st	st	st	-	-	-	-	-	-	/	-	-	-	-	-	-		
6161			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+		
6162			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+		
6163			st	st	-	-	-	-	-	-	-	/	-	-	-	-	-	-		
6164	H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+				
6165	st	st	st	-	-	-	-	-	-	/	-	-	-	-	-	-				
6166	H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+				
6167	H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+				
6168	H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	+				
6169	High	2,7	H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+	5/5		
6170			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+			
6171			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+			
6172			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+			
6173			H+	+	H+	+	+	+	+	+	+	+	+	+	+	+	+		+	

\* Analyses performed according to the COFRAC accreditation ADRIA  
 Summary report (Version 0)  
 BACGene *Listeria* spp.



Matrix : Cantaloupe frozen balls  
 Strain : *Listeria seeligeri* Ad1754

Aerobic mesophilic flora: 2.0 10<sup>5</sup> CFU/g

N° sample	Level	Inoculation level (cfu/sample) MPN	Reference method: ISO 11290-1/A1♦					Alternative method : BACGene Listeria													
			Half Fraser		Fraser		Final Result	Number positive samples/ Total	Actero™ Listeria Enrichment media for 18h at 37°C												
			O&A	PALCAM	O&A	PALCAM			BACGene Listeria Multiplex		BACGene Listeria spp.		Confirmation		BACGene Listeria Multiplex		BACGene Listeria spp.		Fraser 1 48h	Number positive samples/Total	
									PCR CFX96	PCR AriaMx	PCR CFX96	PCR AriaMx	Tests of the reference method	MALDI-TOF tests	Final result CFX96	Final result AriaMx	Final result CFX96	Final result AriaMx			
5330	0	/	st	st	st	-	-	-	-	-	-	-	/	-	-	-	-	-	-	0/5	
5331			st	st	st	-	-	-	-	-	-	-	/	-	-	-	-	-	-		
5332			st	-	st	-	-	-	-	-	-	-	/	-	-	-	-	-	-		
5333			st	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-		
5334			st	-	st	-	-	-	-	-	-	-	/	-	-	-	-	-	-		
5860	Low	0,8	H-	+	H-	+	+	+(26.01)	+(24.75)	+(26.61)	+(24.91)	+	+	+	+	+	+	+	+	18/20	
5861			st	st	H-	+	+	+(26.55)	+(24.63)	+(27.07)	+(25.40)	+	+	+	+	+	+	+	+		
5862			st	st	st	st	-	+(28.09)	+(26.31)	+(28.78)	+(27.39)	+	+	+	+	+	+	+	+		+
5863			1H-	+	H-	+	+	+(26.94)	+(25.20)	+(27.89)	+(26.05)	+	+	+	+	+	+	+	+		+
5864			H-	+	H-	+	+	+(25.09)	+(23.26)	+(25.67)	+(23.99)	+	+	+	+	+	+	+	+		+
5865			st	st	st	-	-	+(26.33)	+(24.63)	+(27.19)	+(25.52)	+	+	+	+	+	+	+	+		+
5866			st	st	st	st	-	+(26.40)	+(24.33)	+(26.94)	+(25.39)	+	+	+	+	+	+	+	+		+
5867			st	st	st	st	-	+(28.42)	+(26.79)	+(29.07)	+(27.29)	+	+	+	+	+	+	+	+		+
5868			H-	+	H-	+	+	+(27.03)	+(25.72)	+(27.48)	+(25.72)	+	+	+	+	+	+	+	+		+
5869			H-	+	H-	+	+	+(27.74)	+(25.66)	+(28.17)	+(26.54)	+	+	+	+	+	+	+	+		+
5870			H-	+	H-	+	+	+(24.70)	+(24.49)	+(25.08)	+(23.79)	+	+	+	+	+	+	+	+		+
5871			st	-	st	-	-	+(26.50)	+(24.59)	+(27.34)	+(25.51)	+	+	+	+	+	+	+	+		+
5872			H-	+	H-	+	+	+(26.39)	+(24.78)	+(27.21)	+(25.68)	+	+	+	+	+	+	+	+		+
5873			H-	+	H-	+	+	-	-	-	-	-	/	-	-	-	-	-	-		-
5874			-	-	-	-	-	+(26.09)	+(24.12)	+(26.62)	+(24.93)	+	+	+	+	+	+	+	+		+
5875			st	-	st	-	-	+(25.20)	+(23.56)	+(25.47)	+(24.01)	+	+	+	+	+	+	+	+		+
5876			st	st	st	st	-	+(26.41)	+(24.90)	+(26.85)	+(25.16)	+	+	+	+	+	+	+	+		+
5877			st	-	-	-	-	+(25.29)	+(23.86)	+(25.98)	+(24.53)	+	+	+	+	+	+	+	+		+
5878			st	+	H-	+	+	+(25.48)	+(23.40)	+(26.01)	+(24.58)	+	+	+	+	+	+	+	+		+
5879			1H-	+	H-	+	+	-	-	-	-	-	/	-	-	-	-	-	-		-
5880	H-	+	H-	+	+	-	-	-	-	-	/	-	-	-	-	-	-	-			
5881	-	-	-	-	-	+(24.41)	+(22.71)	+(25.39)	+(23.70)	+	+	+	+	+	+	+	+	+			
5882	H-	+	H-	+	+	+(24.07)	+(22.51)	+(25.00)	+(2.29)	+	+	+	+	+	+	+	+	+			
5883	H-	+	H-	+	+	+(24.03)	+(22.27)	+(24.77)	+(23.05)	+	+	+	+	+	+	+	+	+			
5884	1H-	+	H-	+	+	+(24.20)	+(22.80)	+(24.82)	+(23.37)	+	+	+	+	+	+	+	+	+			

♦ Analyses performed according to the COFRAC accreditation

Matrix : Frozen cooked shrimp  
 Strain : *Listeria innocua* Ad 1200

Aerobic mesophilic flora: 1.6 10<sup>3</sup>CFU/g

N° sample	Level	Inoculation level (cfu/sample) MPN	Reference method: ISO 11290-1/A1♦					Alternative method : BACGene <i>Listeria</i>											
			Half Fraser		Fraser		Final Result	Number positive samples/ Total	Actero™ <i>Listeria</i> Enrichment media for 18h at 37°C										
			O&A	PALCAM	O&A	PALCAM			BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		Confirmation		BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		Fraser 1 48h
							PCR CFX96	PCR AriaMx	PCR CFX96	PCR AriaMx	Tests of the reference method	MALDI-TOF tests	Final result CFX96	Final result AriaMx	Final result CFX96	Final result AriaMx			
5940	0	0	st	-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	0/5
5941			-	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	
5942			st	-	-	-	-	-	-	-	-	/	-	-	-	-	-	-	
5943			st	st	-	-	-	-	-	-	-	/	-	-	-	-	-	-	
5944			st	st	-	-	-	-	-	-	-	/	-	-	-	-	-	-	
6306	Low	1,0	H-	+	H-	+	+	+(24.70)	+(24.70)	+(25.29)	+(24.02)	+	+	+	+	+	+	12/20	
6307			H-	+	H-	+	+	-	-	-	-	/	-	-	-	-	-		
6308			-	-	-	-	-	-	-	-	-	/	-	-	-	-	-		-
6309			-	-	-	-	-	-	+(24.11)	+(23.67)	+(25.61)	+(24.24)	+	+	+	+	+		+
6310			H-	+	H-	+	+	+	+(21.59)	+(20.88)	+(22.62)	+(21.26)	+	+	+	+	+		+
6311			H-	+	H-	+	+	+	+(19.69)	+(18.91)	+(20.57)	+(19.37)	+	+	+	+	+		+
6312			H-	+	H-	+	+	+	+(20.07)	+(18.81)	+(21.02)	+(19.89)	+	+	+	+	+		+
6313			H-	+	H-	+	+	+	+(21.38)	+(19.99)	+(22.53)	+(21.13)	+	+	+	+	+		+
6314			H-	+	H-	+	+	-	-	-	-	/	-	-	-	-	-		-
6315			H-	+	-	-	+	-	-	-	-	/	-	-	-	-	-		-
6316			H-	+	H-	+	+	-	-	-	-	/	-	-	-	-	-		-
6317			H-	+	H-	+	+	-	-	-	-	/	-	-	-	-	-		-
6318			-	-	st	st	-	+	+(22.29)	+(20.94)	+(22.91)	+(21.43)	+	+	+	+	+		+
6319			-	-	st	-	-	-	-	-	-	/	-	-	-	-	-		-
6320			H-	+	H-	+	+	+	+(21.41)	+(21.63)	+(21.93)	+(21.35)	+	+	+	+	+		+
6321			st	-	st	-	-	+	+(28.71)	+(27.51)	+(29.98)	+(29.29)	+	+	+	+	+		+
6322			H-	+	H-	+	+	+	+(22.50)	+(21.49)	+(23.86)	+(22.22)	+	+	+	+	+		+
6323			H-	+	H-	+	+	+	+(21.05)	+(20.13)	+(22.56)	+(20.64)	+	+	+	+	+		+
6324			H-	+	H-	+	+	-	-	-	-	/	-	-	-	-	-		-
6325			H-	+	H-	+	+	+	+(20.13)	+(19.38)	+(21.38)	+(19.70)	+	+	+	+	+		+
6326	High	2,5	H-	+	H-	+	+	+(19.74)	+(18.88)	+(20.75)	+(18.97)	+	+	+	+	+	+	5/5	
6327			H-	+	H-	+	+	+(23.06)	+(22.16)	+(24.06)	+(22.28)	+	+	+	+	+	+		
6328			H-	+	H-	+	+	+	+(22.03)	+(22.33)	+(22.94)	+(22.91)	+	+	+	+	+		
6329			H-	+	H-	+	+	+	+(19.06)	+(19.49)	+(20.58)	+(20.62)	+	+	+	+	+		
6330			H-	+	H-	+	+	+	+(21.47)	+(19.47)	+(21.45)	+(20.12)	+	+	+	+	+		+

♦ Analyses performed according to the COFRAC accreditation

Matrix: Process water  
 Strain : *Listeria monocytogenes* Ad 551

Aerobic mesophilic flora: 1.2 10<sup>3</sup> CFU/ml

N° sample	Level	Inoculation level (cfu/sample) MPN	Reference method: ISO 11290-1/A1♦					Alternative method : BACGene <i>Listeria</i>													
			Half Fraser		Fraser		Final Result	Number positive samples/ Total	Actero™ <i>Listeria</i> Enrichment media for 18h at 37°C												
			O&A	PALCAM	O&A	PALCAM			BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		Confirmation		BACGene <i>Listeria</i> Multiplex		BACGene <i>Listeria</i> spp.		Fraser 1 48h	Number positive samples/ Total	
						PCR CFX96	PCR AriaMx	PCR CFX96	PCR AriaMx	Tests of the reference method	MALDI-TOF tests	Final result CFX96	Final result AriaMx	Final result CFX96	Final result AriaMx						
6907	0	0	st	-	st	-	-	0/5	-	-	-	-	-	/	-	-	-	-	-	0/5	
6908			st	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-		-
6909			st	-	st	-	-		-	-	-	-	-	-	-	-	-	-	-		-
6910			st	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-		-
6911			st	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-		-
6976	Low	0,6	st	-	-	-	-	9/20	+(22.21)	+(21.86)	+(23.94)	+(21.42)	+	+	+	+	+	+	13/20		
6977			st	st	st	st	-		-	-	-	-	-	-	-	-	-	-		-	
6978			st	st	st	st	-		+(23.59)	+(22.85)	+(24.88)	+(22.96)	+	+	+	+	+	+		+	+
6979			H+	+	H+	+	+		-	-	-	-	-	/	-	-	-	-		-	-
6980			H+	+	H+	+	+		+(22.36)	+(22.13)	+(23.36)	+(22.26)	+	+	+	+	+	+		+	+
6981			H+	+	H+	+	+		+(23.41)	+(21.88)	+(24.00)	+(21.83)	+	+	+	+	+	+		+	+
6982			st	st	st	st	-		+(21.60)	+(20.66)	+(22.77)	+(20.36)	+	+	+	+	+	+		+	+
6983			H+	+	H+	+	+		+(22.93)	+(22.19)	+(40.56)	+(22.00)	+	+	+	+	+	+		+	+
6984			H+	+	H+	+	+		-	-	-	-	-	/	-	-	-	-		-	-
6985			st	st	st	st	-		-	-	-	-	-	/	-	-	-	-		-	-
6986			st	st	st	st	-		+(22.02)	+(21.44)	+(34.00)	+(21.12)	+	+	+	+	+	+		+	+
6987			H+	+	H+	+	+		+(22.32)	+(22.94)	+(26.45)	+(22.42)	+	+	+	+	+	+		+	+
6988			st	-	-	-	-		-	-	-	-	-	/	-	-	-	-		-	-
6989			H+	+	H+	+	+		-	-	-	-	-	/	-	-	-	-		-	-
6990			st	-	-	-	-		+(22.31)	+(21.49)	+(28.40)	+(21.16)	+	+	+	+	+	+		+	+
6991			H+	+	H+	+	+		+(34.28)	+(33.48)	+(36.59)	+(35.13)	+	+	+	+	+	+		+	+
6992			H+	+	H+	+	+		+(21.02)	+(20.71)	+(33.69)	+(20.31)	+	+	+	+	+	+		+	+
6993			st	st	st	st	-		+(33.39)/+(36.30)/+(36.31)	-	-	-	-	/	-	-	-	-		-	-
6994			st	-	-	st	-		+(23.19)	+(22.75)	+(39.21)	+(22.09)	+	+	+	+	+	+		+	+
6995			st	st	-	-	-		+(21.72)	+(22.76)	+(26.25)	+(22.14)	+	+	+	+	+	+		+	+
6996	High	1,9	H+	+	H+	+	+	5/5	+(23.14)	+(23.57)	+(25.00)	+(23.54)	+	+	+	+	+	+	5/5		
6997			H+	+	H+	+	+		+(21.59)	+(21.72)	+(22.78)	+(20.72)	+	+	+	+	+	+			
6998			H+	+	H+	+	+		+(23.76)	+(22.33)	+(24.78)	+(21.91)	+	+	+	+	+	+		+	
6999			H+	+	H+	+	+		+(21.11)	+(19.82)	+(21.14)	+(19.56)	+	+	+	+	+	+		+	
7000			H+	+	H+	+	+		+(20.02)	+(18.92)	+(20.44)	+(18.44)	+	+	+	+	+	+		+	

♦ Analyses performed according to the COFRAC accreditation

**Appendix 8 – Inclusivity and exclusivity study: raw data**  
**(Enrichment step using the Actero™ Listeria Enrichment media)**

Additional strains not required

INCLUSIVITY															
(Pre-warmed Actero™ Listeria Enrichment media for 18 h at 37°C)															
Strains						Inoculation level /225 ml Actero Listeria Enrichment media	BACGene <i>Listeria Multiplex</i> PCR		BACGene <i>Listeria spp</i> PCR		Confirmation				
No	Genus	Species	Reference	Molecular serotypes	Origin		CFX96	AriaMx	CFX96	AriaMx	O&A	PALCAM	MALDI-TOF		
													O&A	PALCAM	TSYEA
1	<i>Listeria</i>	<i>monocytogenes</i>	1011/1410	II a	Frozen broccoli	37	+(17.25)	+(15.50)	+(17.83)	+(14.83)	H+	+	+	+	+
2	<i>Listeria</i>	<i>monocytogenes</i>	Adria 153	VI b	Soft cheese (Munster)	28	+(17.65)	+(15.36)	+(17.96)	+(15.76)	H+	+	+	+	+
3	<i>Listeria</i>	<i>monocytogenes</i>	1973/2400	VI b	Egg and ham pastry (Quiche Lorraine)	21	+(18.17)	+(16.25)	+(17.97)	+(15.60)	H+	+	+	+	+
4	<i>Listeria</i>	<i>monocytogenes</i>	38/181	II a	Toulouse sausages	20	+(18.30)	+(16.45)	+(18.45)	+(15.56)	H+	+	+	+	+
5	<i>Listeria</i>	<i>monocytogenes</i>	7111/7516	IV b	Pâté (Rillettes)	16	+(17.27)	+(25.49)	+(17.58)	+(15.13)	H+	+	+	+	+
6	<i>Listeria</i>	<i>monocytogenes</i>	913/1048	IV b	Black pudding	32	+(17.33)	+(15.95)	+(17.89)	+(15.67)	H+	+	+	+	+
7	<i>Listeria</i>	<i>monocytogenes</i>	A00C036	II a	Poultry (guinea)	20	+(18.27)	+(16.49)	+(19.19)	+(16.22)	H+	+	+	+	+
8	<i>Listeria</i>	<i>monocytogenes</i>	A00C041	L a	Sausage	14	+(18.23)	+(16.56)	+(19.13)	+(16.05)	H+	+	+	+	+
9	<i>Listeria</i>	<i>monocytogenes</i>	A00C044	II b	Poultry (Duck)	32	+(18.87)	+(16.32)	+(18.58)	+(15.41)	H+	+	+	+	+
10	<i>Listeria</i>	<i>monocytogenes</i>	A00L097	II a	Milk	71	+(19.43)	+(17.03)	+(18.62)	+(16.08)	H+	+	+	+	+
11	<i>Listeria</i>	<i>monocytogenes</i>	A00M009	II a	Smoked salmon	37	+(18.65)	+(16.83)	+(18.72)	+(16.11)	H+	+	+	+	+
12	<i>Listeria</i>	<i>monocytogenes</i>	Ad253	II b	Semi-hard cheese	69	+(20.20)	+(18.67)	+(20.60)	+(18.12)	H+	+	+	+	+
13	<i>Listeria</i>	<i>monocytogenes</i>	Ad266	II a	Poultry	35	+(18.24)	+(16.60)	+(18.72)	+(16.27)	H+	+	+	+	+
14	<i>Listeria</i>	<i>monocytogenes</i>	Ad270	IV b	Fermented sausage	73	+(17.79)	+(14.91)	+(17.46)	+(15.43)	H+	+	+	+	+
15	<i>Listeria</i>	<i>monocytogenes</i>	Ad273	II b	Cured delicatessen	64	+(17.90)	+(15.62)	+(18.30)	+(15.31)	H+	+	+	+	+
16	<i>Listeria</i>	<i>monocytogenes</i>	Ad274	II a	Ready-to-eat food (Asiatic meal)	49	+(18.25)	+(15.95)	+(18.02)	+(15.64)	H+	+	+	+	+
17	<i>Listeria</i>	<i>monocytogenes</i>	Ad534	II b	Fruits	69	+(17.51)	+(15.51)	+(17.45)	+(15.14)	H+	+	+	+	+
18	<i>Listeria</i>	<i>monocytogenes</i>	Ad548	II a	Environment (Seafood)	48	+(18.24)	+(15.57)	+(17.39)	+(15.27)	H+	+	+	+	+
19	<i>Listeria</i>	<i>monocytogenes</i>	Ad623	II b	Breadcrumbs	52	+(17.92)	+(15.19)	+(17.56)	+(15.16)	H+	+	+	+	+
20	<i>Listeria</i>	<i>monocytogenes</i>	Ad665	II a	Raw milk	50	+(17.38)	+(15.10)	+(17.27)	+(14.81)	H+	+	+	+	+
21	<i>Listeria</i>	<i>monocytogenes</i>	1972/2399	VI b	Puff pastry with mushrooms	17	+(17.79)	+(15.52)	/	/	H+	+	+	+	+
22	<i>Listeria</i>	<i>monocytogenes</i>	2407/3139	IV b	Tripes with tomatoes	24	+(18.11)	+(16.33)	/	/	H+	+	+	+	+

INCLUSIVITY (Pre-warmed Actero™ <i>Listeria</i> Enrichment media for 18 h at 37°C)															
Strains						Inoculation level /225 ml Actero <i>Listeria</i> Enrichment media	BACGene <i>Listeria Multiplex</i> PCR		BACGene <i>Listeria spp</i> PCR		Confirmation				
							CFX96	AriaMx	CFX96	AriaMx	O&A	PALCAM	MALDI-TOF		
O&A	PALCAM	TSYEA													
No	Genus	Species	Reference	Molecular serotypes	Origin										
23	<i>Listeria</i>	<i>monocytogenes</i>	2760/3145	II a	Raw bacon	19	+(18.14)	+(16.64)	/	/	H+	+	+	+	+
24	<i>Listeria</i>	<i>monocytogenes</i>	32.183	II b	Croque-Monsieur	19	+(18.87)	+(16.56)	/	/	H+	+	+	+	+
25	<i>Listeria</i>	<i>monocytogenes</i>	5721/6179	IV b	Smoked bacon	40	+(19.10)	+(17.04)	/	/	H+	+	+	+	+
26	<i>Listeria</i>	<i>monocytogenes</i>	850/109	II a	RTE food (deli salad with seafood)	11	+(17.24)	+(19.64)	/	/	H+	+	+	+	+
27	<i>Listeria</i>	<i>monocytogenes</i>	877/113	II a	Environmental sample (pastry)	10	+(18.18)	+(16.39)	/	/	H+	+	+	+	+
28	<i>Listeria</i>	<i>monocytogenes</i>	A00C014	II a	Sausage	24	+(18.33)	+(16.47)	/	/	H+	+	+	+	+
29	<i>Listeria</i>	<i>monocytogenes</i>	A00C022	II a	Merguez	27	+(19.39)	+(15.93)	/	/	H+	+	+	+	+
30	<i>Listeria</i>	<i>monocytogenes</i>	A00C024	II a	Sausage	34	+(18.78)	+(16.44)	/	/	H+	+	+	+	+
31	<i>Listeria</i>	<i>monocytogenes</i>	A00C039	II a	Sausages	14	+(18.05)	+(16.29)	/	/	H+	+	+	+	+
32	<i>Listeria</i>	<i>monocytogenes</i>	A00C040	IV b	Cooked delicatessen (Museau)	57	+(17.56)	+(16.00)	/	/	H+	+	+	+	+
33	<i>Listeria</i>	<i>monocytogenes</i>	A00C042	IV b	Raw sausage	49	+(19.03)	+(17.29)	/	/	H+	+	+	+	+
34	<i>Listeria</i>	<i>monocytogenes</i>	A00C043	II a	Smoked Bacon	30	+(21.18)	+(17.28)	/	/	H+	+	+	+	+
35	<i>Listeria</i>	<i>monocytogenes</i>	A00C052	II b	RTE food (Osso bucco with turkey)	34	+(17.68)	+(15.65)	/	/	H+	+	+	+	+
36	<i>Listeria</i>	<i>monocytogenes</i>	A00C053	II a	Gizzards	68	+(19.14)	+(17.29)	/	/	H+	+	+	+	+
37	<i>Listeria</i>	<i>monocytogenes</i>	A00C054	IV b	Beef hart	43	+(17.14)	+(15.51)	/	/	H+	+	+	+	+
38	<i>Listeria</i>	<i>monocytogenes</i>	A00C055	II a	Raw sausages	45	+(17.27)	+(15.27)	/	/	H+	+	+	+	+
39	<i>Listeria</i>	<i>monocytogenes</i>	A00E008	II a	Environmental sample	43	+(18.07)	+(16.29)	/	/	H+	+	+	+	+
40	<i>Listeria</i>	<i>monocytogenes</i>	A00E049	II a	Environmental sample (smoked salmon)	27	+(22.83)	+(20.98)	/	/	H+	+	+	+	+
41	<i>Listeria</i>	<i>monocytogenes</i>	A00E082	II a	Environmental sample (smoked salmon)	44	+(18.33)	+(16.80)	/	/	H+	+	+	+	+
42	<i>Listeria</i>	<i>monocytogenes</i>	A00M032	IV b	Smoked salmon	56	+(17.24)	+(15.39)	/	/	H+	+	+	+	+
43	<i>Listeria</i>	<i>monocytogenes</i>	A00M045	II a	Smoked salmon	32	+(17.13)	+(15.38)	/	/	H+	+	+	+	+
44	<i>Listeria</i>	<i>monocytogenes</i>	A00M088	II a	Smoked salmon	33	+(19.90)	+(18.09)	/	/	H+	+	+	+	+
45	<i>Listeria</i>	<i>monocytogenes</i>	Ad235	II b	Poultry	46	+(17.69)	+(15.98)	/	/	H+	+	+	+	+
46	<i>Listeria</i>	<i>monocytogenes</i>	Ad260	II a	Semi hard cheese	33	+(17.49)	+(15.98)	/	/	H+	+	+	+	+
47	<i>Listeria</i>	<i>monocytogenes</i>	Ad265	II b	Tong	26	+(17.33)	+(15.52)	/	/	H+	+	+	+	+
48	<i>Listeria</i>	<i>monocytogenes</i>	Ad267	II b	Dry sausage	23	+(18.18)	+(16.62)	/	/	H+	+	+	+	+

INCLUSIVITY (Pre-warmed Actero™ Listeria Enrichment media for 18 h at 37°C)															
Strains						Inoculation level /225 ml Actero Listeria Enrichment media	BACGene <i>Listeria Multiplex</i>		BACGene <i>Listeria spp</i>		Confirmation				
							PCR		PCR		O&A	PALCAM	MALDI-TOF		
No	Genus	Species	Reference	Molecular serotypes	Origin		CFX96	AriaMx	CFX96	AriaMx			O&A	PALCAM	O&A
49	<i>Listeria</i>	<i>monocytogenes</i>	Ad268	IV b	Cured ham	75	+(17.59)	+(15.27)	/	/	H+	+	+	+	+
50	<i>Listeria</i>	<i>monocytogenes</i>	Ad272	IV b	Fermented sausage	47	+(16.97)	+(14.91)	/	/	H+	+	+	+	+
51	<i>Listeria</i>	<i>monocytogenes</i>	Ad544	II a	Onion	52	+(18.17)	+(15.71)	/	/	H+	+	+	+	+
52	<i>Listeria</i>	<i>monocytogenes</i>	Ad546	II a	Flour	43	+(18.88)	+(16.61)	/	/	H+	+	+	+	+
53	<i>Listeria</i>	<i>grayi</i>	Ad1198	/	Smoked salmon	17	+(33.92)	+(31.62)	+(34.01)	+(31.15)	H-	st	+	+	+
54	<i>Listeria</i>	<i>grayi</i>	Ad1443	/	Pork meat sausages	24	+(29.92)	+(27.66)	+(30.22)	+(27.41)	H-	st	+	No result/+	+
83	<i>Listeria</i>	<i>grayi</i>	Ad1295	/	Spinach	29	+(26.24)	+(23.96)	+(26.88)	+(25.63)	H-	st	+	+	+
84	<i>Listeria</i>	<i>grayi</i>	Ad1490	/	Salmon terrine	31	+(20.74)	+(18.41)	+(21.59)	+(19.52)	H-	st	+	+	+
85	<i>Listeria</i>	<i>grayi</i>	Ad2148	/	Pork rillettes	11	+(28.43)	+(25.86)	+(29.41)	+(26.19)	H-	st	+	+	+
55	<i>Listeria</i>	<i>innocua</i>	Adria 1	/	Smoked salmon	18	+(19.30)	+(16.84)	+(20.21)	+(17.39)	H-	+	+	No result/+	+
56	<i>Listeria</i>	<i>innocua</i>	Ad658	/	Gorgonzola	61	+(18.07)	+(15.46)	+(17.52)	+(15.47)	H-	+	+	+	+
57	<i>Listeria</i>	<i>innocua</i>	Ad655	/	Brine	21	+(19.36)	+(17.00)	+(19.92)	+(17.93)	H-	+	+	+	+
58	<i>Listeria</i>	<i>innocua</i>	Ad660	/	Breadcrumbs	48	+(17.08)	+(14.58)	+(16.97)	+(15.23)	H-	+	+	+	+
59	<i>Listeria</i>	<i>innocua</i>	Ad663	/	Environment (dairy industry)	33	+(19.27)	+(17.21)	+(19.53)	+(18.22)	H-	+	+	+	+
60	<i>Listeria</i>	<i>innocua</i>	Ad671	/	Smoked bacon	36	+(19.29)	+(17.49)	+(19.67)	+(17.80)	H-	+	+	+	+
61	<i>Listeria</i>	<i>innocua</i>	Ad661	/	Soft cheese (Pont L'Evêque)	29	+(19.68)	+(17.43)	+(20.53)	+(18.32)	H-	+	+	+	+
62	<i>Listeria</i>	<i>innocua</i>	Ad659	/	Environment (dairy industry)	69	+(17.74)	+(15.82)	+(17.77)	+(15.63)	H-	+	+	+	+
63	<i>Listeria</i>	<i>ivanovii</i>	Ad466	/	Raw veal meat	32	+(24.34)	+(21.83)	+(23.72)	+(20.90)	H+	+	+	+	+
64	<i>Listeria</i>	<i>ivanovii</i>	Ad662	/	Environment (dairy industry)	17	+(23.45)	+(20.76)	+(23.63)	+(21.96)	H+	No result/+	+	+	+
65	<i>Listeria</i>	<i>ivanovii</i>	BR11	/	Environment (fish)	35	+(22.74)	+(20.52)	+(23.19)	+(21.11)	H+	No result/+	+	No result/+	+
66	<i>Listeria</i>	<i>ivanovii</i>	Ad1289	/	Raw milk cheese	30	+(22.39)	+(19.80)	+(21.59)	+(19.06)	H+	+	+	+	+
67	<i>Listeria</i>	<i>ivanovii</i>	Ad1290	/	Milk powder	19	+(16.52)	+(14.47)	+(16.35)	+(14.41)	H+	+	+	+	+
68	<i>Listeria</i>	<i>ivanovii</i>	Ad1291	/	Poultry	38	+(26.33)	+(23.99)	+(26.03)	+(23.49)	H+	+	+	+	+
69	<i>Listeria</i>	<i>ivanovii</i>	Ad1288	/	Sheep milk	84	+(21.59)	+(19.31)	+(21.31)	+(19.06)	H+	+	+	+	+
70	<i>Listeria</i>	<i>ivanovii londoniensis</i>	CIP103466	/	/	11	+(27.82)	+(25.67)	+(28.36)	+(26.11)	H+	+	+	+	+
71	<i>Listeria</i>	<i>seeligeri</i>	Ad649	/	Cheese	47	+(17.23)	+(15.28)	+(17.39)	+(14.90)	H-	+	+	+	+
72	<i>Listeria</i>	<i>seeligeri</i>	Ad651	/	Environment	43	+(19.76)	+(17.27)	+(19.30)	+(17.14)	H-	+	+	+	+

INCLUSIVITY (Pre-warmed Actero™ <i>Listeria</i> Enrichment media for 18 h at 37°C)															
Strains						Inoculation level /225 ml Actero <i>Listeria</i> Enrichment media	BACGene <i>Listeria Multiplex</i>		BACGene <i>Listeria spp</i>		Confirmation				
							PCR		PCR		O&A	PALCAM	MALDI-TOF		
No	Genus	Species	Reference	Molecular serotypes	Origin		CFX96	AriaMx	CFX96	AriaMx			O&A	PALCAM	O&A
73	<i>Listeria</i>	<i>seeligeri</i>	Ad652	/	Environment (dairy industry)	34	+(18.94)	+(16.83)	+(18.91)	+(16.61)	H-	+	+	+	+
74	<i>Listeria</i>	<i>seeligeri</i>	Ad674	/	Soft cheese (Munster)	23	+(17.77)	+(15.72)	+(17.97)	+(15.58)	H-	+	+	+	+
75	<i>Listeria</i>	<i>seeligeri</i>	BR1	/	Trout	41	+(17.80)	+(15.77)	+(17.80)	+(15.75)	H-	+	+	+	+
76	<i>Listeria</i>	<i>seeligeri</i>	BR18	/	Environment (fish)	42	+(17.51)	+(15.54)	+(17.45)	+(15.55)	H-	+	+	+	+
77	<i>Listeria</i>	<i>seeligeri</i>	CIP100100	/	/	8	+(26.61)	+(24.22)	+(26.90)	+(24.26)	H-	+	+	+	+
78	<i>Listeria</i>	<i>welshimeri</i>	Ad1276	/	Environment (Slaughterhouse)	63	+(19.03)	+(16.96)	+(18.98)	+(16.86)	H-	+	+	+	+
79	<i>Listeria</i>	<i>welshimeri</i>	Ad1235	/	Beef meat	43	+(21.24)	+(19.36)	+(21.20)	+(18.79)	H-	+	+	+	+
80	<i>Listeria</i>	<i>welshimeri</i>	191424	/	Poultry	35	+(22.36)	+(19.80)	+(21.87)	+(19.47)	H-	+	+	+	+
81	<i>Listeria</i>	<i>welshimeri</i>	Ad1175	/	Ready-to-eat-food	34	+(21.13)	+(18.94)	+(21.12)	+(18.78)	H-	+	+	+	+
82	<i>Listeria</i>	<i>welshimeri</i>	A 650	/	Poultry	39	+(19.98)	+(17.95)	+(20.01)	+(17.56)	H-	+	+	+	+



EXCLUSIVITY (BPW for 24h at 37°C)											
No	Strains				Inoculation level/ml	BACGene Multiplex				BACGene <i>Listeria</i> spp.	
	Genus	Species	Reference	Origin		PCR spp. Results		PCR L.mono Results		CFX96	AriaMx
						CFX96	AriaMx	CFX96	AriaMx		
1	<i>Bacillus</i>	<i>cereus</i>	Ad465	Salmon Terrine	2.6 10 <sup>5</sup>	-	-	-	-	-	-
2	<i>Bacillus</i>	<i>circulans</i>	Ad760	Vegetables	2.6 10 <sup>4</sup>	-	-	-	-	-	-
3	<i>Bacillus</i>	<i>coagulans</i>	Ad731	Dairy product	2.0 10 <sup>4</sup>	-	-	-	-	-	-
4	<i>Bacillus</i>	<i>licheniformis</i>	Ad978	Dairy product	1.0 10 <sup>5</sup>	-	-	-	-	-	-
5	<i>Bacillus</i>	<i>mycoïdes</i>	Ad762	Milk	4.4 10 <sup>5</sup>	-	-	-	-	-	-
6	<i>Bacillus</i>	<i>pseudomycoïdes</i>	Ad765	Vegetables	6.0 10 <sup>4</sup>	-	-	-	-	-	-
7	<i>Bacillus</i>	<i>pumilus</i>	Ad284	Ready-to-eat	5.0 10 <sup>5</sup>	-	-	-	-	-	-
8	<i>Bacillus</i>	<i>weihenstephanensis</i>	Ad726	Egg product	6.6 10 <sup>4</sup>	-	-	-	-	-	-
9	<i>Brochothrix</i>	<i>thermosphacta</i>	EN 15129	Trout	2.6 10 <sup>4</sup>	-	-	-	-	-	-
10	<i>Brochothrix</i>	<i>campestris</i>	CIP 102920T	Environment	6.0 10 <sup>4</sup>	-	-	-	-	-	-
11	<i>Carnobacterium</i>	<i>divergens</i>	CIP 101029 <sup>T</sup>	/	3.0 10 <sup>4</sup>	-	-	-	-	-	-
12	<i>Carnobacterium</i>	<i>piscicola</i>	Ad369	Raw milk	9.2 10 <sup>4</sup>	-	-	-	-	-	-
13	<i>Enterococcus</i>	<i>durans</i>	Ad149	Ham	4.6 10 <sup>4</sup>	-	-	-	-	-	-
14	<i>Enterococcus</i>	<i>faecalis</i>	Adria 89L326	Soft cheese (Vacherin)	3.4 10 <sup>6</sup>	-	-	-	-	-	-
15	<i>Lactobacillus</i>	<i>brevis</i>	Adria 86L126	Ham	8.0 10 <sup>5</sup>	-	-	-	-	-	-
16	<i>Lactobacillus</i>	<i>curvatus</i>	Ad380	Delicatessen	5.0 10 <sup>5</sup>	-	-	-	-	-	-
17	<i>Lactobacillus</i>	<i>fermentum</i>	Ad482	Tomatoes juice	9.9 10 <sup>6</sup>	-	-	-	-	-	-
18	<i>Lactobacillus</i>	<i>sakei</i>	Ad473	Ham	4.2 10 <sup>4</sup>	-	-	-	-	-	-
19	<i>Lactococcus</i>	<i>lactis subsp cremoris</i>	Ad137	Dairy product	6.0 10 <sup>5</sup>	-	-	-	-	-	-
20	<i>Leuconostoc</i>	<i>carosum</i>	Ad411	Ham	2.2 10 <sup>5</sup>	-	-	-	-	-	-
21	<i>Leuconostoc</i>	<i>citreum</i>	Ad396	Ham	4.8 10 <sup>4</sup>	-	-	-	-	-	-
22	<i>Micrococcus</i>	<i>luteus</i>	Ad432	Cocktail	5.0 10 <sup>5</sup>	-	-	-	-	-	-
23	<i>Pediococcus</i>	<i>pentosaceus</i>	ATCC 33316	/	8.3 10 <sup>5</sup>	-	-	-	-	-	-
24	<i>Propionibacterium</i>	<i>freundenreichii</i>	CNRZ 725	Dairy product	1.0 10 <sup>4</sup>	-	-	-	-	-	-
25	<i>Staphylococcus</i>	<i>aureus</i>	Ad165	Smoked delicatessen	1.2 10 <sup>5</sup>	-	-	-	-	-	-
26	<i>Staphylococcus</i>	<i>aureus</i>	Ad902	Nems	3.8 10 <sup>5</sup>	-	-	-	-	-	-
27	<i>Staphylococcus</i>	<i>epidermidis</i>	Ad931	Fruits	2.0 10 <sup>4</sup>	-	-	-	-	-	-
28	<i>Staphylococcus</i>	<i>haemoliticus</i>	Ad989	Dairy product	8.0 10 <sup>4</sup>	-	-	-	-	-	-
29	<i>Streptococcus</i>	<i>bovis</i>	Adria 92L622	Dairy product	8.0 10 <sup>5</sup>	-	-	-	-	-	-
30	<i>Streptococcus</i>	<i>salivarius sps thermophilus</i>	Ad441	Dairy product	4.8 10 <sup>4</sup>	-	-	-	-	-	-
31	<i>Macrocooccus</i>	<i>caseolyticus</i>	CIP100755	Milk	8.3 10 <sup>5</sup>	-	-	-	-	-	-



**Appendix 9 - Results obtained by the collaborative laboratories and the expert laboratory  
(Enrichment step using the Actero™ Listeria Enrichment media)**

**Laboratory A**Aerobic mesophilic flora: 4,4.10<sup>8</sup>CFU/g

Thermocycler: AriaMx

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene Listeria spp.						
	Half Fraser		Fraser		Final result	BACGene Listeria Multiplex	BACGene Listeria spp.	Confirmations	Final result BACGene Listeria Multiplex	Agreement BACGene Listeria Multiplex	Final result BACGene Listeria spp.	Agreement BACGene Listeria spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct	O&A				
A3	-	-	-	-	-	-	-	-	-	NA	-	NA
A5	-	-	-	-	-	-	-	-	-	NA	-	NA
A10	-	-	-	-	-	-	-	-	-	NA	-	NA
A13	-	-	-	-	-	-	-	-	-	NA	-	NA
A17	-	-	-	-	-	-	-	-	-	NA	-	NA
A18	-	-	-	-	-	-	-	-	-	NA	-	NA
A21	-	-	-	-	-	-	-	-	-	NA	-	NA
A24	-	-	-	-	-	-	-	-	-	NA	-	NA
A1	-	-	-	-	-	+(27.20)	+(27.02)	+	+	PD	+	PD
A4	-	-	+	+	+	-	-	-	-	ND	-	ND
A7	+	+	+	+	+	-	-	-	-	ND	-	ND
A9	-	-	-	-	-	+(24.24)	+(24.22)	+	+	PD	+	PD
A11	-	-	-	-	-	+(24.14)	+(24.07)	+	+	PD	+	PD
A16	-	-	-	-	-	-	-	-	-	NA	-	NA
A20	-	+	+	+	+	-	-	-	-	ND	-	ND
A23	+	+	+	+	+	-	-	-	-	ND	-	ND
A2	+	+	+	+	+	+(25.21)	+(25.03)	+	+	PA	+	PA
A6	+	+	+	+	+	+(25.96)	+(25.77)	+	+	PA	+	PA
A8	+	+	+	+	+	+(25.27)	+(25.32)	+	+	PA	+	PA
A12	+	+	+	+	+	+(24.92)	+(25.20)	+	+	PA	+	PA
A14	+	+	+	+	+	+(25.08)	+(25.14)	+	+	PA	+	PA
A15	+	+	+	+	+	+(24.50)	+(24.45)	+	+	PA	+	PA
A19	+	+	+	+	+	+(32.16)	+(31.96)	+	+	PA	+	PA
A22	+	+	+	+	+	+(24.73)	+(24.63)	+	+	PA	+	PA

**Laboratory B**Aerobic mesophilic flora: >1.10<sup>7</sup>CFU/g

Thermocycler: AriaMx

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser		Final result	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct					
B3	-	-	-	-	-	-	-	-	-	NA	-	NA
B5	-	-	-	-	-	-	-	-	-	NA	-	NA
B10	-	-	-	-	-	-	-	-	-	NA	-	NA
B13	-	-	-	-	-	-	-	-	-	NA	-	NA
B17	-	-	-	-	-	-	-	-	-	NA	-	NA
B18	-	-	-	-	-	-	-	-	-	NA	-	NA
B21	-	-	-	-	-	-	-	-	-	NA	-	NA
B24	-	-	-	-	-	-	-	-	-	NA	-	NA
B1	+	+	+	+	+	-	-	-	-	ND	-	ND
B4	-	-	-	-	-	-	-	-	-	NA	-	NA
B7	-	-	-	-	-	+(27.75)	+(26.01)	+	+	PD	+	PD
B9	-	-	-	-	-	-	-	-	-	NA	-	NA
B11	-	-	+	+	+	-	-	-	-	ND	-	ND
B16	-	-	-	-	-	+(24.35)	+(23.69)	+	+	PD	+	PD
B20	-	-	+	+	+	+(26.63)	+(25.64)	+	+	PA	+	PA
B23	+	+	+	+	+	+(24.61)	+(23.69)	+	+	PA	+	PA
B2	+	+	+	+	+	+(33.05)	+(34.71)	+	+	PA	+	PA
B6	+	+	+	+	+	+(33.60)	+(33.33)	+	+	PA	+	PA
B8	+	+	+	+	+	+(25.98)	+(25.14)	+	+	PA	+	PA
B12	+	+	+	+	+	+(32.24)	+(31.94)	+	+	PA	+	PA
B14	-	-	+	+	+	+(26.55)	+(26.55)	+	+	PA	+	PA
B15	+	+	+	+	+	-	-	-	-	ND	-	ND
B19	+	+	+	+	+	+(24.54)	+(23.98)	+	+	PA	+	PA
B22	-	-	+	+	+	+(24.75)	+(24.39)	+	+	PA	+	PA

Laboratory **C**Aerobic mesophilic flora: 1,2.10<sup>6</sup>CFU/g

Thermocycler: AriaMx

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser		Final result	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct					
C3	-	-	-	-	-	-	-	-	-	NA	-	NA
C5	-	-	-	-	-	-	-	-	-	NA	-	NA
C10	-	-	-	-	-	-	-	-	-	NA	-	NA
C13	-	-	-	-	-	-	-	-	-	NA	-	NA
C17	-	-	-	-	-	-	-	-	-	NA	-	NA
C18	-	-	-	-	-	-	-	-	-	NA	-	NA
C21	-	-	-	-	-	-	-	-	-	NA	-	NA
C24	-	-	-	-	-	-	-	-	-	NA	-	NA
C1	-	+	+	+	+	+(20.35)	+(18.55)	+	+	PA	+	PA
C4	+	-	+	+	+	+(22.73)	+(21.35)	+	+	PA	+	PA
C7	+	+	+	+	+	+(22.81)	+(19.57)	+	+	PA	+	PA
C9	-	-	-	-	-	+(20.91)	+(17.92)	+	+	PD	+	PD
C11	+	+	+	+	+	+(27.45)	+(24.32)	+	+	PA	+	PA
C16	-	-	-	-	-	-	-	-	-	NA	-	NA
C20	+	+	+	+	+	-/+(26.76)/+(26.76)/+(25.91)	+(23.85)	+	-	ND	+	PA
C23	+	+	+	+	+	-	-	-	-	ND	-	ND
C2	+	+	+	+	+	+(21.60)	+(18.77)	+	+	PA	+	PA
C6	+	+	+	+	+	+(20.12)	+(18.89)	+	+	PA	+	PA
C8	+	+	+	+	+	+(22.50)	+(19.45)	+	+	PA	+	PA
C12	+	+	+	+	+	+(33.73)	+(29.50)	+	+	PA	+	PA
C14	+	+	+	+	+	+(32.99)	+(31.17)	+	+	PA	+	PA
C15	+	+	+	+	+	-/+(33.72)/+(32.97)/+(33.17)	+(32.45)	+	-	ND	+	PA
C19	+	+	+	+	+	-/+(20.75)/+(20.99)/+(21.25)	+(19.25)	+	-	ND	+	PA
C22	+	+	+	+	+	-/+(20.13)/+(20.28)/+(20.53)	+(18.81)	+	-	ND	+	PA

**Laboratory D**Aerobic mesophilic flora: 3,7.10<sup>7</sup>CFU/g

Thermocycler: Bio-Rad CFX96

N°Sample	Reference method: ISO 11290-1/A1				Final result	Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser			BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct	O&A				
D3	-	-	-	-	-	-	-	-	-	NA	-	NA
D5	-	-	-	-	-	-	-	-	-	NA	-	NA
D10	-	-	-	-	-	-	-	-	-	NA	-	NA
D13	-	-	-	-	-	-	-	-	-	NA	-	NA
D17	-	-	-	-	-	-	-	-	-	NA	-	NA
D18	-	-	-	-	-	-	-	-	-	NA	-	NA
D21	-	-	-	-	-	-	-	-	-	NA	-	NA
D24	-	-	-	-	-	-	-	-	-	NA	-	NA
D1	-	-	-	-	-	+(30.96)	+(32.62)	+	+	PD	+	PD
D4	+	+	+	+	+	+(28.65)	+(30.19)	+	+	PA	+	PA
D7	-	-	-	-	-	+(28.94)	+(30.60)	+	+	PD	+	PD
D9	-	-	-	-	-	-	-	-	-	NA	-	NA
D11	-	-	-	-	-	-	-	-	-	NA	-	NA
D16	+	+	+	+	+	+(39.11)/+(38.01)/ +(39.99)/+(39.21)	-	-	-	PPND	-	ND
D20	-	-	-	-	-	+(35.01)	+(37.85)	+	+	PD	+	PD
D23	+	+	+	+	+	+(34.24)	+(36.42)	+	+	PA	+	PA
D2	+	+	+	+	+	+(25.78)	+(27.27)	+	+	PA	+	PA
D6	+	+	+	+	+	+(27.58)	+(29.14)	+	+	PA	+	PA
D8	+	+	+	+	+	+(25.98)	+(27.42)	+	+	PA	+	PA
D12	+	+	+	+	+	+(26.29)	+(27.84)	+	+	PA	+	PA
D14	+	+	+	+	+	+(30.30)	+(31.88)	+	+	PA	+	PA
D15	-	-	-	-	-	+(37.40)	+(41.05)	- (+ after subculture in fraser)	+	PD	+	PD
D19	+	+	+	+	+	+(37.42)	+(41.67)	- (+ after subculture in fraser)	+	PA	+	PA
D22	+	+	+	+	+	+(29.03)	+(30.74)	+	+	PA	+	PA

**Laboratory E**Aerobic mesophilic flora: 1,7.10<sup>7</sup>CFU/g

Thermocycler: Bio-Rad CFX96

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser		Final result	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct					
E3	-	-	-	-	-	-	-	-	-	NA	-	NA
E5	-	-	-	-	-	-	-	-	-	NA	-	NA
E10	-	-	-	-	-	-	-	-	-	NA	-	NA
E13	-	-	-	-	-	-	-	-	-	NA	-	NA
E17	-	-	-	-	-	-	-	-	-	NA	-	NA
E18	-	-	-	-	-	-	-	-	-	NA	-	NA
E21	-	-	-	-	-	-	-	-	-	NA	-	NA
E24	-	-	-	-	-	-	-	-	-	NA	-	NA
E1	-	-	-	-	-	+(28.92)	+(29.09)	+	+	PD	+	PD
E4	+	+	+	+	+	+(29.03)	+(29.84)	+	+	PA	+	PA
E7	-	-	+	+	+	+(35.54)	+(35.21)	+	+	PA	+	PA
E9	-	-	-	-	-	+(27.09)	+(27.41)	+	+	PD	+	PD
E11	+	+	+	+	+	+(29.08)	+(29.08)	+	+	PA	+	PA
E16	+	+	+	+	+	-	-	-	-	ND	-	ND
E20	+	+	+	+	+	+(25.07)	+(26.53)	+	+	PA	+	PA
E23	+	+	+	+	+	-	-	-	-	ND	-	ND
E2	+	+	+	+	+	+(26.93)	+(27.34)	+	+	PA	+	PA
E6	+	+	+	+	+	+(26.30)	+(27.07)	+	+	PA	+	PA
E8	+	+	+	+	+	+(23.41)	+(24.42)	+	+	PA	+	PA
E12	+	+	+	+	+	+(22.46)	+(22.45)	+	+	PA	+	PA
E14	+	+	+	+	+	+(24.87)	+(24.86)	+	+	PA	+	PA
E15	+	+	+	+	+	+(24.01)	+(24.66)	+	+	PA	+	PA
E19	+	+	+	+	+	+(24.27)	+(24.66)	+	+	PA	+	PA
E22	+	+	+	+	+	+(22.54)	+(22.78)	+	+	PA	+	PA

**Laboratory F**Aerobic mesophilic flora: 3,56.10<sup>7</sup>CFU/g

Thermocycler: Bio-Rad CFX96

N°Sample	Reference method: ISO 11290-1/A1				Final result	Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser			BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct	O&A				
F3	-	-	-	-	-	-	-	-	-	NA	-	NA
F5	-	-	-	-	-	-	-	-	-	NA	-	NA
F10	-	-	-	-	-	-	-	-	-	NA	-	NA
F13	-	-	-	-	-	-	-	-	-	NA	-	NA
F17	-	-	-	-	-	-	-	-	-	NA	-	NA
F18	-	-	-	-	-	-	-	-	-	NA	-	NA
F21	-	-	-	-	-	-	-	-	-	NA	-	NA
F24	-	-	-	-	-	-	-	-	-	NA	-	NA
F1	-	+	-	-	+	+(34.0)	+(32.9)	+	+	PA	+	PA
F4	+	+	+	+	+	+(26.2)	+(26.5)	+	+	PA	+	PA
F7	+	+	+	+	+	+(27.4)	+(27.6)	+	+	PA	+	PA
F9	-	+	+	+	+	+(29.0)	+(29.4)	+	+	PA	+	PA
F11	-	-	-	-	-	+(26.6)	+(26.6)	+	+	PD	+	PD
F16	+	+	+	+	+	+(27.3)	+(27.2)	+	+	PA	+	PA
F20	+	+	+	+	+	-	-	-	-	ND	-	ND
F23	+	+	+	+	+	+(26.5)	+(26.7)	+	+	PA	+	PA
F2	+	+	+	+	+	+(24.7)	+(24.5)	+	+	PA	+	PA
F6	+	+	+	+	+	+(33.0)	+(32.5)	+	+	PA	+	PA
F8	+	+	+	+	+	+(31.0)	+(31.0)	+	+	PA	+	PA
F12	+	+	+	+	+	+(35.7)	+(35.9)	+	+	PA	+	PA
F14	+	+	+	+	+	+(25.0)	+(24.9)	+	+	PA	+	PA
F15	+	+	+	+	+	+(24.0)	+(24.1)	+	+	PA	+	PA
F19	+	+	+	+	+	+(26.2)	+(26.8)	+	+	PA	+	PA
F22	+	+	+	+	+	+(23.6)	+(23.7)	+	+	PA	+	PA

**Laboratory G**Aerobic mesophilic flora: 3,9.10<sup>8</sup>CFU/g

Thermocycler: Bio-Rad CFX96

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser		Final result	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct	O&A				
G3	-	-	-	-	-	-	-	-	-	NA	-	NA
G5	-	-	-	-	-	-	-	-	-	NA	-	NA
G10	-	-	-	-	-	-	-	-	-	NA	-	NA
G13	-	-	-	-	-	-	-	-	-	NA	-	NA
G17	-	-	-	-	-	-	-	-	-	NA	-	NA
G18	-	-	-	-	-	-	-	-	-	NA	-	NA
G21	-	-	-	-	-	-	-	-	-	NA	-	NA
G24	-	-	-	-	-	-	-	-	-	NA	-	NA
G1	-	-	-	-	-	-	-	-	-	NA	-	NA
G4	-	-	-	-	-	-	-	-	-	NA	-	NA
G7	+	+	+	+	+	+(30.04)	+(34.35)	+	+	PA	+	PA
G9	+	+	+	+	+	+(27.40)	+(30.67)	+	+	PA	+	PA
G11	+	+	+	+	+	+(25.79)	+(29.81)	+	+	PA	+	PA
G16	+	+	+	+	+	+(24.40)	+(27.53)	+	+	PA	+	PA
G20	+	+	+	+	+	+(25.83)	+(28.15)	+	+	PA	+	PA
G23	-	-	-	-	-	+(28.90)	+(31.41)	+	+	PD	+	PD
G2	+	+	+	+	+	-	-	-	-	ND	-	ND
G6	+	+	+	+	+	+(22.45)	-/+(26.96)/ +(27.09)/+(26.70)	+	+	PA	-	ND
G8	+	+	+	+	+	+(22.17)	+(25.68)	+	+	PA	+	PA
G12	+	+	+	+	+	+(24.19)	+(27.11)	+	+	PA	+	PA
G14	+	+	+	+	+	+(21.26)	+(23.85)	+	+	PA	+	PA
G15	+	+	+	+	+	+(33.96)	+(37.10)	+	+	PA	+	PA
G19	+	+	+	+	+	+(28.22)	+(31.14)	+	+	PA	+	PA
G22	+	+	+	+	+	+(23.43)	+(25.67)	+	+	PA	+	PA

**Laboratory H**Aerobic mesophilic flora: 7,5.10<sup>8</sup>CFU/g

Thermocycler: AriaMx

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser		Final result	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct	O&A				
H3	-	-	-	-	-	-	-	-	-	NA	-	NA
H5	-	-	-	-	-	-	-	-	-	NA	-	NA
H10	-	-	-	-	-	-	-	-	-	NA	-	NA
H13	-	-	-	-	-	-	-	-	-	NA	-	NA
H17	-	-	-	-	-	-	-	-	-	NA	-	NA
H18	-	-	-	-	-	-	-	-	-	NA	-	NA
H21	-	-	-	-	-	-	-	-	-	NA	-	NA
H24	-	-	-	-	-	-	-	-	-	NA	-	NA
H1	-	-	-	-	-	+(25.57)	+(23.90)	+	+	PD	+	PD
H4	-	-	-	-	-	-	-	-	-	NA	-	NA
H7	+	+	+	+	+	-	-	-	-	ND	-	ND
H9	-	-	-	-	-	-	-	-	-	NA	-	NA
H11	+	+	+	+	+	-	-	-	-	ND	-	ND
H16	+	+	+	+	+	-	-	-	-	ND	-	ND
H20	+	+	+	+	+	+(21.89)	+(22.08)	+	+	PA	+	PA
H23	+	+	+	+	+	-	-	-	-	ND	-	ND
H2	+	+	+	+	+	+(22.40)	+(21.07)	+	+	PA	+	PA
H6	+	+	+	+	+	+(24.92)	+(23.75)	+	+	PA	+	PA
H8	+	+	+	+	+	+(25.00)	+(24.15)	+	+	PA	+	PA
H12	+	+	+	+	+	+(21.92)	+(20.76)	+	+	PA	+	PA
H14	+	+	+	+	+	+(22.83)	+(20.96)	+	+	PA	+	PA
H15	+	+	+	+	+	+(26.77)	+(25.96)	+	+	PA	+	PA
H19	+	+	+	+	+	+(20.70)	+(20.69)	+	+	PA	+	PA
H22	+	+	+	+	+	+(22.95)	+(22.96)	+	+	PA	+	PA



## Laboratory I

Aerobic mesophilic flora: 1,4.10<sup>7</sup>CFU/g

Thermocycler: AriaMx

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser		Final result	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct					
I3	-	-	-	-	-	-	-	-	-	NA	-	NA
I5	-	-	-	-	-	-	-	-	-	NA	-	NA
I10	-	-	-	-	-	-	-	-	-	NA	-	NA
I13	-	-	-	-	-	-	-	-	-	NA	-	NA
I17	-	-	-	-	-	-	-	-	-	NA	-	NA
I18	-	-	-	-	-	-	-	-	-	NA	-	NA
I21	-	-	-	-	-	-	-	-	-	NA	-	NA
I24	-	-	-	-	-	-	-	-	-	NA	-	NA
I1	+	+	+	+	+	-	-	-	-	ND	-	ND
I4	+	+	+	+	+	-	-	-	-	ND	-	ND
I7	+	+	+	+	+	+(27.61)	+(27.29)	+	+	PA	+	PA
I9	+	+	+	+	+	+(20.19)	+(19.84)	+	+	PA	+	PA
I11	-	+	+	+	+	+(22.77)	+(22.74)	+	+	PA	+	PA
I16	+	+	+	+	+	-	-	-	-	ND	-	ND
I20	+	+	+	+	+	+(22.30)	+(22.06)	+	+	PA	+	PA
I23	+	+	+	+	+	+(22.32)	+(21.95)	+	+	PA	+	PA
I2	+	+	+	+	+	+(20.29)	+(19.93)	+	+	PA	+	PA
I6	+	+	+	+	+	+(27.41)	+(27.33)	+	+	PA	+	PA
I8	+	+	+	+	+	+(22.27)	+(22.05)	+	+	PA	+	PA
I12	+	+	+	+	+	+(21.84)	+(21.83)	+	+	PA	+	PA
I14	+	+	+	+	+	+(21.01)	+(20.84)	+	+	PA	+	PA
I15	+	+	+	+	+	+(25.00)	+(24.81)	+	+	PA	+	PA
I19	+	+	+	+	+	+(21.61)	+(21.49)	+	+	PA	+	PA
I22	+	+	+	+	+	+(21.87)	+(21.56)	+	+	PA	+	PA

## Laboratory J

Aerobic mesophilic flora: 6,6.10<sup>8</sup>CFU/g

Thermocycler: AriaMx

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser		Final result	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct					
J3	-	-	-	-	-	-	-	-	-	NA	-	NA
J5	-	-	-	-	-	-	-	-	-	NA	-	NA
J10	-	-	-	-	-	-	-	-	-	NA	-	NA
J13	-	-	-	-	-	-	-	-	-	NA	-	NA
J17	-	-	-	-	-	-	-	-	-	NA	-	NA
J18	-	-	-	-	-	-	-	-	-	NA	-	NA
J21	-	-	-	-	-	-	-	-	-	NA	-	NA
J24	-	-	-	-	-	-	-	-	-	NA	-	NA
J1	-	-	-	-	-	-	-	-	-	NA	-	NA
J4	+	+	+	+	+	+(23.17)	+(22.78)	+	+	PA	+	PA
J7	-	-	-	-	-	+(26.90)	+-(26.63)	+	+	PD	+	PD
J9	+	+	+	+	+	+(29.81)	+(29.72)	+	+	PA	+	PA
J11	-	-	-	-	-	+(21.97)	+(22.05)	+	+	PD	+	PD
J16	+	+	+	+	+	-	-	-	-	ND	-	ND
J20	-	-	-	-	-	-	-	-	-	NA	-	NA
J23	+	+	+	+	+	+(20.70)	+(20.41)	+	+	PA	+	PA
J2	+	+	+	+	+	+(22.34)	+(21.92)	+	+	PA	+	PA
J6	+	+	+	+	+	+(26.90)	+(26.59)	+	+	PA	+	PA
J8	+	+	+	+	+	+(29.87)	+(29.48)	+	+	PA	+	PA
J12	+	+	+	+	+	+(22.23)	+(22.16)	+	+	PA	+	PA
J14	+	+	+	+	+	+(28.39)	+(28.06)	+	+	PA	+	PA
J15	+	+	+	+	+	+(24.78)	+(24.42)	+	+	PA	+	PA
J19	+	+	+	+	+	+(22.73)	+(23.27)	+	+	PA	+	PA
J22	+	+	+	+	+	+(21.86)	+(21.47)	+	+	PA	+	PA

**Laboratory K**Aerobic mesophilic flora: >10<sup>8</sup>CFU/g (~8.10<sup>8</sup>CFU/g)

Thermocycler: Bio-Rad CFX96

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser		Final result	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct	O&A				
K3	-	-	-	-	-	-	-	-	-	NA	-	NA
K5	-	-	-	-	-	-	-	-	-	NA	-	NA
K10	-	-	-	-	-	-	-	-	-	NA	-	NA
K13	-	-	-	-	-	-	-	-	-	NA	-	NA
K17	-	-	-	-	-	-	-	-	-	NA	-	NA
K18	-	-	-	-	-	-	-	-	-	NA	-	NA
K21	-	-	-	-	-	-	-	-	-	NA	-	NA
K24	-	-	-	-	-	-	-	-	-	NA	-	NA
K1	-	-	-	-	-	-	-	-	-	NA	-	NA
K4	+	+	+	+	+	+(29.31)	+(29.55)	+	+	PA	+	PA
K7	+	+	+	+	+	+(35.29)	+(35.58)	+	+	PA	+	PA
K9	+	+	+	+	+	+(27.62)	+(27.70)	+	+	PA	+	PA
K11	-	-	-	-	-	+(26.12)	+(26.43)	+	+	PD	+	PD
K16	+	+	+	+	+	-	-	-	-	ND	-	ND
K20	-	-	-	-	-	-	-	-	-	NA	-	NA
K23	+	+	+	+	+	+(30.72)	+(30.67)	+	+	PA	+	PA
K2	+	+	+	+	+	+(30.06)	+(29.95)	+	+	PA	+	PA
K6	+	+	+	+	+	+(30.56)	+(30.44)	+	+	PA	+	PA
K8	+	+	+	+	+	+(27.32)	+(27.36)	+	+	PA	+	PA
K12	+	+	+	+	+	+(27.43)	+(27.02)	+	+	PA	+	PA
K14	+	+	+	+	+	+(26.72)	+(26.44)	+	+	PA	+	PA
K15	+	+	+	+	+	+(27.15)	+(27.06)	+	+	PA	+	PA
K19	+	+	+	+	+	+(25.56)	+(25.76)	+	+	PA	+	PA
K22	+	+	+	+	+	+(25.01)	+(24.89)	+	+	PA	+	PA

## Laboratory L

Aerobic mesophilic flora: 8,7.10<sup>7</sup>CFU/g

Thermocycler: Bio-Rad CFX96

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene Listeria spp.						
	Half Fraser		Fraser		Final result	BACGene Listeria Multiplex	BACGene Listeria spp.	Confirmations	Final result BACGene Listeria Multiplex	Agreement BACGene Listeria Multiplex	Final result BACGene Listeria spp.	Agreement BACGene Listeria spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct					
L3	-	-	-	nd	-	-	-	-	-	NA	-	NA
L5	-	-	-	nd	-	-	-	-	-	NA	-	NA
L10	-	-	-	nd	-	-	-	-	-	NA	-	NA
L13	-	-	-	nd	-	-	-	-	-	NA	-	NA
L17	-	-	-	nd	-	-	-	-	-	NA	-	NA
L18	-	-	-	nd	-	-	-	-	-	NA	-	NA
L21	-	-	-	nd	-	-	-	-	-	NA	-	NA
L24	-	-	-	nd	-	-	-	-	-	NA	-	NA
L1	-	-	-	nd	-	+(29.86)	+(30.57)	+	+	PD	+	PD
L4	-	-	+	nd	+	-	-	-	-	ND	-	ND
L7	-	+	+	nd	+	-	-	-	-	ND	-	ND
L9	-	-	-	nd	-	+(34.68)	+(35.00)	+	+	PD	+	PD
L11	+	+	+	nd	+	+(23.35)	+(22.78)	+	+	PA	+	PA
L16	-	-	-	nd	-	+(23.24)	+(23.01)	+	+	PD	+	PD
L20	+	-	+	nd	+	+(22.32)	+(21.74)	+	+	PA	+	PA
L23	-	-	+	nd	+	-	-	-	-	ND	-	ND
L2	+	+	+	nd	+	+(29.99)	+(29.34)	+	+	PA	+	PA
L6	-	-	+	nd	+	+(21.61)	+(21.46)	+	+	PA	+	PA
L8	+	+	+	nd	+	+(25.41)	+(25.46)	+	+	PA	+	PA
L12	+	+	+	nd	+	+(23.33)	+(23.07)	+	+	PA	+	PA
L14	+	+	+	nd	+	+(23.08)	+(23.07)	+	+	PA	+	PA
L15	-	-	-	nd	-	+(25.38)	+(25.06)	+	+	PD	+	PD
L19	-	+	+	nd	+	+(29.25)	+(28.76)	+	+	PA	+	PA
L22	+	+	+	nd	+	+(31.24)	+(30.87)	+	+	PA	+	PA

**Laboratory M**Aerobic mesophilic flora: 1,7.10<sup>9</sup>CFU/g

Thermocycler: Bio-Rad CFX96

N°Sample	Reference method: ISO 11290-1/A1				Final result	Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser			BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct	O&A				
M3	-	-	-	-	-	-	-	-	-	NA	-	NA
M5	-	-	-	-	-	-	-	-	-	NA	-	NA
M10	-	-	-	-	-	-	-i	-	-	NA	-	NA
M13	-	-	+	-	+	-	-i	-	-	ND	-	ND
M17	-	-	+	-	+	-	i/i	-	-	ND	-	ND
M18	-	-	-	-	-	-	i/i	-	-	NA	-	NA
M21	-	-	-	-	-	-	i/i	-	-	NA	-	NA
M24	-	-	-	-	-	-	-	-	-	NA	-	NA
M1	-	-	-	-	-	-	-/-	-	-	NA	-	NA
M4	+	+	+	+	+	-	-i	-	-	ND	-	ND
M7	+	+	+	+	+	+(22.62)	+(30.12)/(22.04)	+	+	PA	+	PA
M9	-	-	+	-	+	-	-i	-	-	ND	-	ND
M11	+	+	+	+	+	+(22.72)	+(24.43)/(23.75)	+	+	PA	+	PA
M16	-	-	+	-	+	+(27.84)	+(35.53)/(28.35)	+	+	PA	+	PA
M20	+	+	+	+	+	+(29.32)	+(31.65)/(29.45)	+	+	PA	+	PA
M23	+	+	+	+	+	+(21.76)	+(25.21)/(22.76)	+	+	PA	+	PA
M2	+	+	+	+	+	+(23.42)	+(24.58)/(23.24)	+	+	PA	+	PA
M6	+	+	+	+	+	+(22.46)	+(22.94)/(23.23)	+	+	PA	+	PA
M8	+	+	+	+	+	+(22.23)	+(23.69)/(21.88)	+	+	PA	+	PA
M12	+	+	+	+	+	+(21.81)	+(22.08)/(22.07)	+	+	PA	+	PA
M14	+	+	+	+	+	+(23.22)	+(24.66)/(22.40)	+	+	PA	+	PA
M15	+	+	+	+	+	+(25.02)	+(29.61)/(26.01)	+	+	PA	+	PA
M19	+	+	+	+	+	+(22.22)	+(26.57)/(25.55)	+	+	PA	+	PA
M22	+	+	+	+	+	+(28.69)	+(31.95)/(28.68)	+	+	PA	+	PA

**Laboratory N**Aerobic mesophilic flora: 2,09.10<sup>7</sup>CFU/g

Thermocycler: Bio-Rad CFX96

N°Sample	Reference method: ISO 11290-1/A1					Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser		Final result	BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct					
N3	-	-	-	-	-	-	-	-	-	NA	-	NA
N5	-	-	-	-	-	-	-	-	-	NA	-	NA
N10	-	-	-	-	-	-	-	-	-	NA	-	NA
N13	-	-	-	-	-	-	-	-	-	NA	-	NA
N17	-	-	-	-	-	+(39.39)/-/-	+(40.24)/-/-	-	-	PPNA	-	PPNA
N18	-	-	-	-	-	-	-	-	-	NA	-	NA
N21	-	-	-	-	-	-	-	-	-	NA	-	NA
N24	-	-	-	-	-	-	-	-	-	NA	-	NA
N1	+	+	+	+	+	-	-	-	-	ND	-	ND
N4	+	+	+	+	+	+(23.64)	+(23.88)	+	+	PA	+	PA
N7	+	+	+	+	+	+(24.14)	+(24.56)	+	+	PA	+	PA
N9	+	+	+	+	+	-	-	-	-	ND	-	ND
N11	-	-	-	-	-	+(27.18)	+(27.63)	+	+	PD	+	PD
N16	+	+	+	+	+	+(24.08)	+(24.19)	+	+	PA	+	PA
N20	+	+	+	+	+	+(24.16)	+(24.39)	+	+	PA	+	PA
N23	+	+	+	+	+	+(23.87)	+(24.13)	+	+	PA	+	PA
N2	+	+	+	+	+	+(22.31)	+(22.53)	+	+	PA	+	PA
N6	+	+	+	+	+	+(28.71)	+(29.02)	+	+	PA	+	PA
N8	+	+	+	+	+	+(19.89)	+(20.11)	+	+	PA	+	PA
N12	+	+	+	+	+	+(21.96)	+(22.49)	+	+	PA	+	PA
N14	+	+	+	+	+	+(24.32)	+(24.33)	+	+	PA	+	PA
N15	+	+	+	+	+	+(24.98)	+(25.00)	+	+	PA	+	PA
N19	+	+	+	+	+	+(26.58)	+(26.56)	+	+	PA	+	PA
N22	+	+	+	+	+	+(24.92)	+(24.95)	+	+	PA	+	PA

Laboratory **O**Aerobic mesophilic flora: 1,6.10<sup>8</sup>CFU/g

Thermocycler: AriaMx

N°Sample	Reference method: ISO 11290-1/A1				Final result	Alternative method : BACGene <i>Listeria</i> spp.						
	Half Fraser		Fraser			BACGene <i>Listeria</i> Multiplex	BACGene <i>Listeria</i> spp.	Confirmations	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct	O&A				
O3	-	-	-	-	-	-	-	-	-	NA	-	NA
O5	-	-	-	-	-	-	-	-	-	NA	-	NA
O10	-	-	-	-	-	-	-	-	-	NA	-	NA
O13	-	-	-	-	-	-	-	-	-	NA	-	NA
O17	-	-	-	-	-	-	-	-	-	NA	-	NA
O18	-	-	-	-	-	-	-	-	-	NA	-	NA
O21	-	-	-	-	-	-	-	-	-	NA	-	NA
O24	-	-	-	-	-	+(36.92)/-/-	+(35.71)/-/-	-	-	PPNA	-	PPNA
O1	-	-	+	+	+	-	-	-	-	ND	-	ND
O4	-	-	-	-	-	+(24.41)	+(24.22)	+	+	PD	+	PD
O7	+	+	+	+	+	-	-	-	-	ND	-	ND
O9	-	+	+	+	+	-	-	-	-	ND	-	ND
O11	-	-	-	-	-	+(24.82)	+(25.00)	+	+	PD	+	PD
O16	+	+	+	+	+	+(20.17)	+(19.91)	+	+	PA	+	PA
O20	+	+	+	+	+	+(22.80)	+(22.29)	+	+	PA	+	PA
O23	+	+	+	+	+	-	-	-	-	ND	-	ND
O2	-	-	+	+	+	+(22.82)	+(22.64)	+	+	PA	+	PA
O6	-	+	+	+	+	+(20.50)	+(20.26)	+	+	PA	+	PA
O8	+	+	+	+	+	+(18.96)	+(19.45)	+	+	PA	+	PA
O12	+	+	+	+	+	+(22.44)	+(22.67)	+	+	PA	+	PA
O14	+	+	+	+	+	+(19.01)	+(19.19)	+	+	PA	+	PA
O15	+	+	+	+	+	+(26.40)	+(26.72)	+	+	PA	+	PA
O19	+	+	+	+	+	+(19.43)	+(19.44)	+	+	PA	+	PA
O22	-	+	+	+	+	+(23.50)	+(22.32)	+	+	PA	+	PA

## Laboratory P

Aerobic mesophilic flora: >10<sup>8</sup>CFU/g (>2,1.10<sup>8</sup>CFU/g)

Thermocycler: AriaMx

N°Sample	Reference method: ISO 11290-1/A1				Final result	Alternative method : BACGene Listeria spp.						
	Half Fraser		Fraser			BACGene Listeria Multiplex	BACGene Listeria spp.	Confirmations	Final result BACGene Listeria Multiplex	Agreement BACGene Listeria Multiplex	Final result BACGene Listeria spp.	Agreement BACGene Listeria spp.
	O&A	PALCAM	O&A	PALCAM		Ct	Ct	O&A				
P3	-	-	-	-	-	-	-	-	-	NA	-	NA
P5	-	-	-	-	-	-	-	-	-	NA	-	NA
P10	-	-	-	-	-	-	-	-	-	NA	-	NA
P13	-	-	-	-	-	-	-	-	-	NA	-	NA
P17	-	-	-	-	-	-	-	-	-	NA	-	NA
P18	-	-	-	-	-	-	-	-	-	NA	-	NA
P21	-	-	-	-	-	-	-	-	-	NA	-	NA
P24	-	-	-	-	-	-	-	-	-	NA	-	NA
P1	+	-	-	-	+	-	-	-	-	ND	-	ND
P4	+	-	+	+	+	-	-	-	-	ND	-	ND
P7	+	+	+	+	+	+(26.85)	+(25.71)	+	+	PA	+	PA
P9	-	-	+	+	+	-	-	-	-	ND	-	ND
P11	+	+	+	+	+	+(25.40)	+(24.46)	+	+	PA	+	PA
P16	+	-	+	+	+	+(27.19)	+(25.58)	+	+	PA	+	PA
P20	+	-	+	+	+	-	-	-	-	ND	-	ND
P23	+	+	+	+	+	+(22.60)	+(21.31)	+	+	PA	+	PA
P2	+	+	+	+	+	+(23.85)	+(22.71)	+	+	PA	+	PA
P6	+	+	+	+	+	+(24.04)	+(22.70)	+	+	PA	+	PA
P8	+	+	+	+	+	+(23.52)	+(22.36)	+	+	PA	+	PA
P12	+	+	+	+	+	+(22.17)	+(21.25)	+	+	PA	+	PA
P14	+	+	+	+	+	+(26.44)	+(25.39)	+	+	PA	+	PA
P15	+	+	+	+	+	+(31.78)	+(29.89)	+	+	PA	+	PA
P19	+	+	+	+	+	+(29.73)	+(21.49)	+	+	PA	+	PA
P22	+	+	+	+	+	+(27.06)	+(25.76)	+	+	PA	+	PA



## Laboratory Z (Adria)

Aerobic mesophilic flora: 5,5.10<sup>8</sup>CFU/g

Thermocyclers: AriaMx and CFX96

N° Sample	Reference method: ISO 11290-1/A1*					Alternative method: BACGene <i>Listeria</i> spp.										
	Half Fraser		Fraser		Final result	BACGene <i>Listeria</i> Multiplex				BACGene <i>Listeria</i> spp.		Confir- mations  O&A	Final result BACGene <i>Listeria</i> Multiplex	Agreement BACGene <i>Listeria</i> Multiplex	Final result BACGene <i>Listeria</i> spp.	Agreement BACGene <i>Listeria</i> spp.
	O&A	PALCAM	O&A	PALCAM		Ct		Ct								
						CFX96	AriaMx	CFX96	AriaMx							
Z3	-	-	-	-	-	-	-	-	-	-	-	-	NA	-	NA	
Z5	-	-	-	-	-	-	-	-	-	-	-	-	NA	-	NA	
Z10	-	-	-	-	-	-	-	-	-	-	-	-	NA	-	NA	
Z13	-	-	-	-	-	-	-	-	-	-	-	-	NA	-	NA	
Z17	-	-	-	-	-	-	-	-	-	-	-	-	NA	-	NA	
Z18	-	-	-	-	-	-	-	-	-	-	-	-	NA	-	NA	
Z21	-	-	-	-	-	-	-	-	-	-	-	-	NA	-	NA	
Z24	-	-	-	-	-	-	-	-	-	-	-	-	NA	-	NA	
Z1	-	-	-	-	-	-	-	-	-	-	-	-	NA	-	NA	
Z4	+	+	+	+	+	-	+(36.30)/-/(36.30)/ -/(34.72)/-/ +(36.48)/(33.67)/(35.37)/-/-	-	-	-	-	-	PPNA	-	ND	
Z7	-	-	-	-	-	+(27.04)	+(23.66)	+(27.46)	+(25.51)	+	+	+	PD	+	PD	
Z9	+	+	+	+	+	+(24.84)	+(21.49)	+(25.12)	+(23.69)	+	+	+	PA	+	PA	
Z11	+	+	+	+	+	-	-	-	-	-	-	-	ND	-	ND	
Z16	+	+	+	+	+	+(25.26)	+(21.83)	+(25.27)	+(23.74)	+	+	+	PA	+	PA	
Z20	-	-	-	-	-	+(36.99)/(34.69)/-/(36.48)/-/ -/(37.34)/-/(37.49)/-/-	-	-	-	-	-	-	PPNA	-	NA	
Z23	+	+	+	+	+	-	-	-	-	-	-	-	ND	-	ND	
Z2	+	+	+	+	+	+(24.73)	+(21.62)	+(24.92)	+(23.61)	+	+	+	PA	+	PA	
Z6	+	+	+	+	+	+(27.16)	+(24.16)	+(27.43)	+(26.36)	+	+	+	PA	+	PA	
Z8	+	+	+	+	+	+(26.02)	+(22.77)	+(26.25)	+(24.73)	+	+	+	PA	+	PA	
Z12	+	+	+	+	+	+(27.69)	+(24.48)	+(27.71)	+(26.49)	+	+	+	PA	+	PA	
Z14	+	+	+	+	+	+(24.98)	+(21.83)	+(25.05)	+(24.16)	+	+	+	PA	+	PA	
Z15	+	+	+	+	+	+(27.78)	+(24.13)	+(28.11)	+(26.56)	+	+	+	PA	+	PA	
Z19	+	+	+	+	+	+(25.37)	+(22.06)	+(25.38)	+(24.20)	+	+	+	PA	+	PA	
Z22	+	+	+	+	+	+(27.45)	+(24.50)	+(40.25)	+(27.24)	+	+	+	PA	+	PA	

\* Analyses performed according to the COFRAC accreditation

ADRIA

153/220

30 October 2023

Summary report (Version 0)

BACGene *Listeria* spp.

Appendix 10 – Artificial contamination of samples (Enrichment step using the BACGro ULTRA Listeria Broth (BULB)) (Extension study, 2023)

Year of analysis	N° Sample	Product (French name)	Product	Artificial contaminations						Global result <i>Listeria</i> spp.		Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample		CFX96 Touch™ (standard)	AriaMx™		
								Enumeration	Mean				
2023	1385	Piémontaise au jambon	Piemontaise with ham	<i>L. monocytogenes</i> Ad3267	Vegetables	Seeding 48h 3±2°C	/	2-3-4-4-2	3,0	+	+	1	a
2023	1386	Piémontaise au jambon	Piemontaise with ham	<i>L. monocytogenes</i> Ad2598	Vegetables	Seeding 48h 3±2°C	/	2-1-4-6-2	3,0	+	+	1	a
2023	1387	Piémontaise au jambon	Piemontaise with ham	<i>L. monocytogenes</i> Ad2598	Vegetables	Seeding 48h 3±2°C	/	2-1-4-6-2	3,0	+	+	1	a
2023	1873	Sandwich saumon salade pain de mie complet	Sandwich with salmon, salad, wholemeal bread	<i>L. monocytogenes</i> Ad1492 <i>L. welshimeri</i> Ad3207	RTE product/RTE product	Seeding 48h 3±2°C	/	0-0-2-0-0 1-0-2-0-1	0,4 0,8	+	+	1	a
2023	1874	Sandwich jambon beurre pain de mie complet	Sandwich with ham, butter, wholemeal bread	<i>L. monocytogenes</i> Ad1492 <i>L. welshimeri</i> Ad3207	RTE product/RTE product	Seeding 48h 3±2°C	/	0-0-2-0-0 1-0-2-0-1	0,4 0,8	+	+	1	a
2023	1875	Club sandwich poulet rôti mayonnaise avec farine complète	Sandwich with roasted chicken meat, mayonnaise, wholemeal bread	<i>L. monocytogenes</i> Ad1492 <i>L. welshimeri</i> Ad3207	RTE product/RTE product	Seeding 48h 3±2°C	/	0-0-2-0-0 1-0-2-0-1	0,4 0,8	+	+	1	a
2023	1876	Club sandwich Emmental crudités avec farine complète	Sandwich with cheese, vegetables, wholemeal bread	<i>L. monocytogenes</i> Ad1495 <i>L. grayi</i> Ad 1504	RTE product/RTE product	Seeding 48h 3±2°C	/	1-1-2-1-1 2-0-1-0-1	1,2 0,8	-	-	1	a
2023	1877	Mini farfalles au thon tomate ail et ciboulette	Pasta salad with tuna, tomatoes and garlic	<i>L. monocytogenes</i> Ad1495 <i>L. grayi</i> Ad 1504	RTE product/RTE product	Seeding 48h 3±2°C	/	1-1-2-1-1 2-0-1-0-1	1,2 0,8	-	-	1	a
2023	1878	Salade fusillu et jambon cuit comté tomates cerises et vinaigre balsamique	Pasta salad with cooked ham, tomatoes	<i>L. monocytogenes</i> Ad1495 <i>L. grayi</i> Ad 1504	RTE product/RTE product	Seeding 48h 3±2°C	/	1-1-2-1-1 2-0-1-0-1	1,2 0,8	-	-	1	a
2023	1879	Salade Manhattan, crudités œuf poulet rôti carottes et fromage	Salad with vegetables, eggs, chicken meat, carrot and cheese	<i>L. monocytogenes</i> Ad1492 <i>L. grayi</i> Ad 1504	RTE product/RTE product	Seeding 48h 3±2°C	/	0-0-2-0-0 2-0-1-0-1	0,4 0,8	-	-	1	a
2023	2151	Apéritif olives, feta, tomates séchées, origan	Olives with cheese and tomatoes	<i>L. monocytogenes</i> Ad3266 <i>L. grayi</i> Ad1504	RTRH product/RTRH product	Seeding 48h 3±2°C	/	2-2-1-3-0 0-0-0-1-1	1,6 0,4	+	+	1	a
2023	2152	Mini roulé coppa, fromage de vache et ricotta	RTE ham with cheese	<i>L. monocytogenes</i> Ad3266 <i>L. grayi</i> Ad1504	RTRH product/RTRH product	Seeding 48h 3±2°C	/	2-2-1-3-0 0-0-0-1-1	1,6 0,4	+	+	1	a
2023	2153	Petits poivrons farcis, fromage de vache et ricotta	RTE pepper with cheese	<i>L. monocytogenes</i> Ad1213	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-0-0-1-1	0,6	+	+	1	a
2023	2154	Salade jambon sec, chèvre et sauce vinaigrette	Salad with ham, cheese and sauce	<i>L. monocytogenes</i> Ad3266 <i>L. grayi</i> Ad1504	RTRH product/RTRH product	Seeding 48h 3±2°C	/	2-2-1-3-0 0-0-0-1-1	1,6 0,4	+	+	1	a
2023	2155	Salade océane, thon, œuf, sauce cocktail	Salad with tuna, eggs and sauce	<i>L. monocytogenes</i> Ad1213	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-0-0-1-1	0,6	-	-	1	a
2023	2156	Sandwich thon crudités avec pain de mie complet	Salad with tuna, vegetables, wholemeal bread	<i>L. monocytogenes</i> Ad3266 <i>L. grayi</i> Ad1504	RTRH product/RTRH product	Seeding 48h 3±2°C	/	2-2-1-3-0 0-0-0-1-1	1,6 0,4	+	+	1	a
2023	2157	Sandwich poulet, crudités, baguette viennoise	Sandwich with chicken meat and vegetables	<i>L. monocytogenes</i> Ad1213	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-0-0-1-1	0,6	+	+	1	a
2023	2158	Wrap poulet rôti façon fajitas sauce salsa	Wrap sandwich with sauce	<i>L. monocytogenes</i> Ad3266 <i>L. grayi</i> Ad1504	RTRH product/RTRH product	Seeding 48h 3±2°C	/	2-2-1-3-0 0-0-0-1-1	1,6 0,4	+	+	1	a
2023	2159	Wrap falafel tomates salade	Wrap sandwich with falafel, tomatoes and salad	<i>L. monocytogenes</i> Ad1213	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-0-0-1-1	0,6	-	-	1	a
2023	1916	Pizza 4 fromages	Pizza, 4 cheeses	<i>L. monocytogenes</i> Ad1678 <i>L. innocua</i> Ad1676	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-1-0-1-0/0-0-0-0-1	0,6 0,2	+	+	1	b
2023	1917	Pizza jambon fromage	Pizza with ham and cheese	<i>L. monocytogenes</i> Ad1678 <i>L. innocua</i> Ad1676	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-1-0-1-0/0-0-0-0-1	0,6 0,2	+	+	1	b
2023	1918	Quiche aux trois fromages (emmental, reblochon, chèvre)	Cheese pie	<i>L. monocytogenes</i> Ad1678 <i>L. innocua</i> Ad1676	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-1-0-1-0 0-0-0-0-1	0,6 0,2	+	+	1	b

Year of analysis	N° Sample	Product (French name)	Product	Artificial contaminations						Global result <i>Listeria</i> spp.		Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample		CFX96 Touch™ (standard)	AriaMx™		
								Enumeration	Mean				
2023	1919	Couscous à la marocaine poulet et merguez	Couscous	<i>L. monocytogenes</i> Ad1678 <i>L. innocua</i> Ad1676	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-1-0-1-0 0-0-0-0-1	0,6 0,2	+	+	1	b
2023	1920	Coucou royal aux 3 viandes	Couscous with 3 meats	<i>L. monocytogenes</i> Ad1678 <i>L. innocua</i> Ad1676	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-1-0-1-0 0-0-0-0-1	0,6 0,2	+	+	1	b
2023	939	Flan à la part	Pastry flan	<i>L. innocua</i> Ad644	Pastry	Seeding 48h 3±2°C	/	1-0-1-1-5	1,6	+	+	1	c
2023	940	Flan pâtissier	Pastry flan	<i>L. innocua</i> Ad644	Pastry	Seeding 48h 3±2°C	/	1-0-1-1-5	1,6	+	+	1	c
2023	941	Tortilla espagnole moelleuse à l'oignon	Omelet (with onions)	<i>L. monocytogenes</i> Ad1195	Egg product	Seeding 48h 3±2°C	/	3-2-2-1-1	1,8	-	-	1	c
2023	942	Tortilla espagnole aux pommes de terre	Omelet (with potatoes)	<i>L. monocytogenes</i> Ad1195	Egg product	Seeding 48h 3±2°C	/	3-2-2-1-1	1,8	+	+	1	c
2023	943	Coupe bavaroise aux fraises	Pastry with strawberries	<i>L. innocua</i> Ad644	Pastry	Seeding 48h 3±2°C	/	1-0-1-1-5	1,6	+	+	1	c
2023	944	Paris Brest	Pastry with custard	<i>L. innocua</i> Ad644	Pastry	Seeding 48h 3±2°C	/	1-0-1-1-5	1,6	+	+	1	c
2023	945	Eclair vanille	Pastry with custard (vanilla)	<i>L. innocua</i> Ad644	Pastry	Seeding 48h 3±2°C	/	1-0-1-1-5	1,6	+	+	1	c
2023	1880	Flan pâtissier	Pastry flan	<i>L. monocytogenes</i> Ad1757	Egg product	Seeding 48h 3±2°C	/	1-3-1-1-1	1,4	+	+	1	c
2023	1881	Choux chantilly	Pastry with chantilly	<i>L. monocytogenes</i> Ad1757	Egg product	Seeding 48h 3±2°C	/	1-3-1-1-1	1,4	+	+	1	c
2023	1882	Choux à la crème	Pastry with cream	<i>L. monocytogenes</i> Ad1757 <i>L. grayi</i> Ad1490	Egg product / RTRH product	Seeding 48h 3±2°C	/	2-0-1-1-1 1-1-0-4-3	1,0 1,8	+	+	1	c
2023	1883	Tarte Tropicaine	Pastry with cream	<i>L. monocytogenes</i> Ad1757 <i>L. grayi</i> Ad1490	Egg product / RTRH product	Seeding 48h 3±2°C	/	2-0-1-1-1 1-1-0-4-3	1,0 1,8	+	+	1	c
2023	1884	Tortilla espagnole avec pommes de terre	Omelet with potatoes	<i>L. grayi</i> Ad1490	RTRH product	Seeding 48h 3±2°C	/	3-6-0-2-1	2,4	-	-	1	c
2023	1885	Tortilla fraiche aux oignons	Omelet with onions	<i>L. grayi</i> Ad1490	RTRH product	Seeding 48h 3±2°C	/	3-6-0-2-1	2,4	-	-	1	c
2023	2250	Flan aux oeufs cuit et doré au four	Pastry flan	<i>L. monocytogenes</i> Ad1195	Egg product	Spiking Heat treatment 56°C 10min (in BHI)	0,5	2-6-5-1-2	3,2	+	+	1	c
2023	2251	Eclair café	Pastry, with cream flavour coffee	<i>L. monocytogenes</i> Ad1195	Egg product	Spiking Heat treatment 56°C 10min (in BHI)	0,5	2-6-5-1-2	3,2	+	+	1	c
2023	2252	Fraisier	Pastry with cream and strawberry	<i>L. monocytogenes</i> Ad1195	Egg product	Spiking Heat treatment 56°C 10min (in BHI)	0,5	2-6-5-1-2	3,2	+	+	1	c
2023	2253	Choux chantilly	Pastry with chantilly	<i>L. monocytogenes</i> Ad1195	Egg product	Spiking Heat treatment 56°C 10min (in BHI)	0,5	2-6-5-1-2	3,2	+	+	1	c
2023	1905	Bœuf bourguignon	Cooked beef meat	<i>L. ivanovii</i> Ad1292	Meat product	Seeding 48h 3±2°C	/	3-0-0-1-0	0,8	+	+	2	b
2023	1906	Blanquette de veau	Cooked veal meat	<i>L. monocytogenes</i> Ad265	Meat product	Seeding 48h 3±2°C	/	2-1-0-1-2	1,2	+	+	2	b
2023	1907	Lapin chasseur	Cooked rabbit meat	<i>L. monocytogenes</i> Ad265	Meat product	Seeding 48h 3±2°C	/	2-1-0-1-2	1,2	+	+	2	b
2023	1908	Poulet basquaise au piment du Pays basque	Cooked chicken meat	<i>L. monocytogenes</i> Ad265	Meat product	Seeding 48h 3±2°C	/	2-1-0-1-2	1,2	+	+	2	b
2023	1909	Roti de porc, RTRH	Cooked pork meat	<i>L. monocytogenes</i> Ad265	Meat product	Seeding 48h 3±2°C	/	2-1-0-1-2	1,2	+	+	2	b
2023	2160	Fromage au lait cru de Brebis Ossau iraty	Raw ewe milk cheese	<i>L. monocytogenes</i> Ad1205 <i>L. seeligeri</i> Ad1783	Cheese sample / Dairy product	Seeding 48h 3±2°C	/	1-3-0-0-2 1-2-2-0-1	1,2 1,2	+	+	3	a
2023	2161	Roquefort au lait cru de chèvre	Raw goat milk cheese	<i>L. monocytogenes</i> Ad1205 <i>L. seeligeri</i> Ad1783	Cheese sample / Dairy product	Seeding 48h 3±2°C	/	1-3-0-0-2 1-2-2-0-1	1,2 1,2	+	+	3	a
2023	2162	Morbier au lait cru de vache	Raw cow milk cheese	<i>L. monocytogenes</i> Ad1205 <i>L. seeligeri</i> Ad1783	Cheese sample / Dairy product	Seeding 48h 3±2°C	/	1-3-0-0-2 1-2-2-0-1	1,2 1,2	+	+	3	a
2023	2163	Bethmale au lait cru de vache	Raw cow milk cheese	<i>L. monocytogenes</i> Ad1205 <i>L. seeligeri</i> Ad1783	Cheese sample / Dairy product	Seeding 48h 3±2°C	/	1-3-0-0-2 1-2-2-0-1	1,2 1,2	+	+	3	a
2023	2164	Rocamadour au lait cru de chèvre	Raw goat milk cheese	<i>L. monocytogenes</i> Ad1205 <i>L. seeligeri</i> Ad1783	Cheese sample / Dairy product	Seeding 48h 3±2°C	/	1-3-0-0-2 1-2-2-0-1	1,2 1,2	+	+	3	a



Year of analysis	N° Sample	Product (French name)	Product	Artificial contaminations						Global result <i>Listeria</i> spp.		Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample		CFX96 Touch™ (standard)	AriaMx™		
								Enumeration	Mean				
2023	2165	Chavignol au lait cru de chèvre	Raw goat milk cheese	<i>L. monocytogenes</i> Ad1205 <i>L. seeligeri</i> Ad1783	Cheese sample / Dairy product	Seeding 48h 3±2°C	/	1-3-0-0-2 1-2-2-0-1	1,2 1,2	+	+	3	a
2023	2388	Brie de Meaux au lait cru	Raw cow milk cheese	<i>L. monocytogenes</i> Ad250	Dairy product	Seeding 48h 3±2°C	/	3-2-1-2-2	2,0	+	+	3	a
2023	2389	Tomme de chèvre au lait cru	Raw goat milk cheese	<i>L. monocytogenes</i> Ad250	Dairy product	Seeding 48h 3±2°C	/	3-2-1-2-2	2,0	+	+	3	a
2023	2390	Tomme de brebis au lait cru	Raw ewe milk cheese	<i>L. monocytogenes</i> Ad250	Dairy product	Seeding 48h 3±2°C	/	3-2-1-2-2	2,0	+	+	3	a
2023	2391	Emmental grand cru au lait cru de vache	Raw cow milk cheese	<i>L. monocytogenes</i> Ad250	Dairy product	Seeding 48h 3±2°C	/	3-2-1-2-2	2,0	+	+	3	a
2023	2611	Emmental au lait cru	Raw milk cheese	<i>L. monocytogenes</i> Ad471	Dairy product	Seeding 48h 3±2°C	/	2-2-3-3-2	2,4	+	+	3	a
2023	2166	Lait cru fermenté de vache	Raw milk cheese	<i>L. ivanovii</i> Ad679	Dairy product	Seeding 48h 3±2°C	/	1-0-0-1-1	0,6	+	+	3	b
2023	2167	Lait cru de vache jersiaise	Raw milk cheese	<i>L. ivanovii</i> Ad679	Dairy product	Seeding 48h 3±2°C	/	1-0-0-1-1	0,6	-	-	3	b
2023	2168	Fromage blanc au lait cru de vache	White cheese with raw cow milk	<i>L. monocytogenes</i> Ad1785	Dairy product	Seeding 48h 3±2°C	/	4-2-2-3-4	3,0	-	-	3	b
2023	2169	Fromage blanc au lait cru de vache	White cheese with raw cow milk	<i>L. ivanovii</i> Ad679	Dairy product	Seeding 48h 3±2°C	/	1-0-0-1-1	0,6	-	-	3	b
2023	2170	Crème crue fermière au lait cru de vache	Cream with raw cow milk	<i>L. ivanovii</i> Ad679	Dairy product	Seeding 48h 3±2°C	/	1-0-0-1-1	0,6	+	+	3	b
2023	2171	Crème crue fermière au lait cru de vache	Cream with raw cow milk	<i>L. monocytogenes</i> Ad1785	Dairy product	Seeding 48h 3±2°C	/	4-2-2-3-4	3,0	+	+	3	b
2023	2392	Beurre cru de vache, baratte, demi-sel	Raw butter with salt	<i>L. monocytogenes</i> Ad261 <i>L. welshimeri</i> Ad1667	Dairy product	Seeding 48h 3±2°C	/	2-0-0-2-1 1-1-1-2-0	1,0 1,0	+	+	3	b
2023	2393	Beurre de baratte au lait cru demi-sel	Butter with raw milk and salt	<i>L. monocytogenes</i> Ad261 <i>L. welshimeri</i> Ad1667	Dairy product	Seeding 48h 3±2°C	/	2-0-0-2-1 1-1-1-2-0	1,0 1,0	+	+	3	b
2023	2394	Faisselle au lait cru de vache	Cottage cheese with raw cow milk	<i>L. monocytogenes</i> Ad261 <i>L. welshimeri</i> Ad1667	Dairy product	Seeding 48h 3±2°C	/	2-0-0-2-1 1-1-1-2-0	1,0 1,0	-	-	3	b
2023	2395	Fromage blanc fermier au lait cru entier de vache	White cheese with raw cow milk	<i>L. monocytogenes</i> Ad261 / <i>L. welshimeri</i> Ad1667	Dairy product	Seeding 48h 3±2°C	/	2-0-0-2-1 1-1-1-2-0	1,0 1,0	-	-	3	b
2023	2396	Crème crue	Raw cream	<i>L. monocytogenes</i> Ad261 <i>L. welshimeri</i> Ad1667	Dairy product	Seeding 48h 3±2°C	/	2-0-0-2-1 1-1-1-2-0	1,0 1,0	-	-	3	b
2023	2397	Crème crue au lait cru de vache	Raw cream with raw cow milk	<i>L. monocytogenes</i> Ad261 <i>L. welshimeri</i> Ad1667	Dairy product	Seeding 48h 3±2°C	/	2-0-0-2-1 1-1-1-2-0	1,0 1,0	-	-	3	b
2023	2610	Beurre doux à la crème maturé non pasteurisé	Butter with raw milk	<i>L. monocytogenes</i> Ad471	Dairy product	Seeding 48h 3±2°C	/	2-2-3-3-2	2,4	+	+	3	b
2023	932	Petit basque au lait de brebis pasteurisé (36%MG)	Pasteurized ewe milk cheese (36% FL)	<i>L. monocytogenes</i> Ad2858	Dairy product	Seeding 48h 3±2°C	/	1-1-4-1-2	1,8	+	+	3	c
2023	933	Tomme des Pyrénées au lait de vache pasteurisé (28%MG)	Pasteurized cow milk cheese (28% FL)	<i>L. monocytogenes</i> Ad2858	Dairy product	Seeding 48h 3±2°C	/	1-1-4-1-2	1,8	+	+	3	c
2023	934	Bûche de chèvre au lait pasteurisé (23% MG)	Pasteurized goat milk cheese (23% FL)	<i>L. innocua</i> Ad636	Dairy product	Seeding 48h 3±2°C	/	2-2-3-3-5	3,0	+	+	3	c
2023	935	Riz au lait saveur vanille	Rice pudding (vanilla)	<i>L. monocytogenes</i> Ad2858	Dairy product	Seeding 48h 3±2°C	/	1-1-4-1-2	1,8	+	+	3	c
2023	936	Semoule au lait saveur vanille	Milk semolina (vanilla)	<i>L. innocua</i> Ad636	Dairy product	Seeding 48h 3±2°C	/	2-2-3-3-5	3,0	+	+	3	c
2023	937	Crème fraîche légère épaisse pasteurisée	Pasteurized fresh cream (light)	<i>L. monocytogenes</i> Ad2858	Dairy product	Seeding 48h 3±2°C	/	1-1-4-1-2	1,8	+	+	3	c
2023	938	Crème fraîche entière gastronomique pasteurisée	Pasteurized fresh cream (whole)	<i>L. innocua</i> Ad636	Dairy product	Seeding 48h 3±2°C	/	2-2-3-3-5	3,0	+	+	3	c
2023	1910	Crème fraîche épaisse légère pasteurisée	Pasteurised cream, thick and light	<i>L. monocytogenes</i> Ad3119 <i>L. seeligeri</i> Ad3275	Dairy product/Dairy product	Seeding 48h 3±2°C	/	0-2-0-0-0 0-0-0-0-0	0,4 0,0	+	+	3	c

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				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample		CFX96 Touch™ (standard)	AriaMx™		
								Enumeration	Mean				
2023	1911	Crème fraîche épaisse pasteurisée	Pasteurised cream, thick	<i>L. monocytogenes</i> Ad3119 <i>L. seeligeri</i> Ad3275	Dairy product/Dairy product	Seeding 48h 3±2°C	/	0-2-0-0-0 0-0-0-0-0	0,4 0,0	+	+	3	c
2023	1912	Riz au lait vanille	Rice pudding (vanilla)	<i>L. monocytogenes</i> Ad3119 / <i>L. seeligeri</i> Ad3275	Dairy product/Dairy product	Seeding 48h 3±2°C	/	0-2-0-0-0 0-0-0-0-0	0,4 0,0	+	+	3	c
2023	1913	Panna cotta et son coulis mangue passion	Panna cotta with fruit sauce	<i>L. monocytogenes</i> Ad3119 <i>L. seeligeri</i> Ad3275	Dairy product/Dairy product	Seeding 48h 3±2°C	/	0-2-0-0-0 0-0-0-0-0	0,4 0,0	+	+	3	c
2023	1914	Panna cotta et son coulis caramel au lait	Panna cotta with caramel	<i>L. monocytogenes</i> Ad3119 <i>L. seeligeri</i> Ad3275	Dairy product/Dairy product	Seeding 48h 3±2°C	/	0-2-0-0-0 0-0-0-0-0	0,4 0,0	+	+	3	c
2023	1915	Lait demi écrémé frais pasteurisé	Pasteurised fresh milk, semi-skimmed milk	<i>L. monocytogenes</i> Ad3119 <i>L. seeligeri</i> Ad3275	Dairy product/Dairy product	Seeding 48h 3±2°C	/	0-2-0-0-0 0-0-0-0-0	0,4 0,0	+	+	3	c
2023	2254	Semoule au lait et à la vanille	Semolina with milk and vanilla	<i>L. monocytogenes</i> Ad2757	Dairy product	Spiking Heat treatment 56°C 10min (in BHI)	0,5	3-5-3-7-6	4,8	+	+	3	c
2023	2255	Mozzarella mini	Pasteurised cheese, mozzarella	<i>L. monocytogenes</i> Ad2757	Dairy product	Spiking Heat treatment 56°C 10min (in BHI)	0,5	3-5-3-7-6	4,8	+	+	3	c
2023	2256	Mozzarella	Pasteurised cheese, mozzarella	<i>L. monocytogenes</i> Ad2757	Dairy product	Spiking Heat treatment 56°C 10min (in BHI)	0,5	3-5-3-7-6	4,8	+	+	3	c
2023	2257	Ricotta	Pasteurised cheese, ricotta	<i>L. monocytogenes</i> Ad2757	Dairy product	Spiking Heat treatment 56°C 10min (in BHI)	0,5	3-5-3-7-6	4,8	+	+	3	c
2023	1172	Graines germées Alfalfa bio	Organic sprouts, Alfalfa	<i>L. monocytogenes</i> Ad3263	Vegetable product	Seeding 48h 3±2°C	/	2-0-4-5-3	2,8	+	+	4	a
2023	1173	Mélange graines germées (Alfalfa, radis, fenouil)	Sprouts (alfalfa, radish, fennel)	<i>L. welshimeri</i> Ad3251	Vegetable product	Seeding 48h 3±2°C	/	2-3-3-1-3	2,4	+	+	4	a
2023	1174	Jeunes pousses mélange mesclun	Baby leaves (mix)	<i>L. monocytogenes</i> Ad3263	Vegetable product	Seeding 48h 3±2°C	/	2-0-4-5-3	2,8	+	+	4	a
2023	1175	Jeunes pousses mâche	Baby leaves (lamb's lettuce)	<i>L. seeligeri</i> Ad1754	Vegetable product	Seeding 48h 3±2°C	/	3-2-2-4-2	2,6	+	+	4	a
2023	1176	Epinards frais	Fresh spinach	<i>L. welshimeri</i> Ad3251	Vegetable product	Seeding 48h 3±2°C	/	2-3-3-1-3	2,4	+	+	4	a
2023	1177	Epinards frais à cuire	Fresh spinach	<i>L. seeligeri</i> Ad1754	Vegetable product	Seeding 48h 3±2°C	/	3-2-2-4-2	2,6	+	+	4	a
2023	1372	Graines germées Alfalfa, radis, fenouil bio	Sprouts (alfalfa, radish, fennel)	<i>L. monocytogenes</i> Ad3268	Vegetables	Seeding 48h 3±2°C	/	6-5-2-5-3	4,2	+	+	4	a
2023	1373	Graine germées Alfalfa bio	Sprouts (organic alfalfa)	<i>L. monocytogenes</i> Ad2643	Vegetables	Seeding 48h 3±2°C	/	3-3-1-1-1	1,8	+	+	4	a
2023	1374	Brocolis	Broccolis	<i>L. grayi</i> Ad1296	Vegetables	Seeding 48h 3±2°C	/	3-3-2-1-2	2,2	-	-	4	a
2023	1375	Céleri branche	Celery stalk	<i>L. monocytogenes</i> Ad3268	Vegetables	Seeding 48h 3±2°C	/	6-5-2-5-3	4,2	+	+	4	a
2023	1376	Navet violet	Purple turnip	<i>L. monocytogenes</i> Ad2643	Vegetables	Seeding 48h 3±2°C	/	3-3-1-1-1	1,8	+	+	4	a
2023	1377	Endive	Endive	<i>L. grayi</i> Ad1296	Vegetables	Seeding 48h 3±2°C	/	3-3-2-1-2	2,2	+	+	4	a
2023	1378	Chou	Cabbage	<i>L. monocytogenes</i> Ad3268	Vegetables	Seeding 48h 3±2°C	/	6-5-2-5-3	4,2	+	+	4	a
2023	1379	Jeunes pousses tendres (mâche, épinard, laitue verte et rouge)	Baby leaves (lamb's lettuce, spinach, lettuce)	<i>L. grayi</i> Ad1296	Vegetables	Seeding 48h 3±2°C	/	3-3-2-1-2	2,2	-	-	4	a
2023	1180	Macédoine de légumes	Vegetable macédoine	<i>L. monocytogenes</i> Ad1180	Vegetable product	Seeding 48h 3±2°C	/	4-0-3-1-3	2,2	+	+	4	b
2023	1181	Macédoine de légumes	Vegetable macédoine	<i>L. monocytogenes</i> Ad1180	Vegetable product	Seeding 48h 3±2°C	/	4-0-3-1-3	2,2	+	+	4	b
2023	1381	Ratatouille	Ratatouille	<i>L. monocytogenes</i> Ad3267	Vegetables	Seeding 48h 3±2°C	/	2-3-4-4-2	3,0	+	+	4	b
2023	1382	Cœur de laitue en sachet	Bagged lettuce	<i>L. monocytogenes</i> Ad3267	Vegetables	Seeding 48h 3±2°C	/	2-3-4-4-2	3,0	+	+	4	b
2023	1388	Macédoine de légumes	Vegetable macedoine	<i>L. monocytogenes</i> Ad2598	Vegetables	Seeding 48h 3±2°C	/	2-1-4-6-2	3,0	+	+	4	b
2023	1178	Houmous de poivrons	Bell pepper hummus	<i>L. monocytogenes</i> Ad3263 <i>L. welshimeri</i> Ad3251	Vegetable product / Vegetable product	Seeding 48h 3±2°C	/	2-1-0-0-1 1-2-0-1-0	0,8 0,8	+	+	4	c
2023	1179	Guacamole	Guacamole	<i>L. seeligeri</i> Ad1754	Vegetable product	Seeding 48h 3±2°C	/	3-2-2-4-2	2,6	+	+	4	c

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				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample		CFX96 Touch™ (standard)	AriaMx™		
								Enumeration	Mean				
2023	1182	Choux fleur à croquer	Cauliflower ready to eat	<i>L. monocytogenes</i> Ad1180/ <i>L. seeligeri</i> Ad1754	Vegetable product / Vegetable product	Seeding 48h 3±2°C	/	1-2-3-0-0 2-0-0-2-2	1,2 1,2	+	+	4	c
2023	1183	Baby carottes à croquer	Baby carrots ready to eat	<i>L. monocytogenes</i> Ad1180/ <i>L. welshimeri</i> Ad3251	Vegetable product / Vegetable product	Seeding 48h 3±2°C	/	1-2-3-0-0 1-2-0-1-0	1,2 0,8	+	+	4	c
2023	1380	Tartare de légumes	Vegetable tartar	<i>L. monocytogenes</i> Ad3267	Vegetables	Seeding 48h 3±2°C	/	2-3-4-4-2	3,0	+	+	4	c
2023	1383	Caviar d'aubergine	Eggplant caviar	<i>L. monocytogenes</i> Ad3267	Vegetables	Seeding 48h 3±2°C	/	2-3-4-4-2	3,0	+	+	4	c
2023	1384	Caviar d'aubergine	Eggplant caviar	<i>L. monocytogenes</i> Ad3267	Vegetables	Seeding 48h 3±2°C	/	2-3-4-4-2	3,0	+	+	4	c
2023	1389	Coleslaw	Coleslaw	<i>L. monocytogenes</i> Ad2598	Vegetables	Seeding 48h 3±2°C	/	2-1-4-6-2	3,0	+	+	4	c
2023	1390	Tapenade d'olives vertes	Tapenade of green olives	<i>L. welshimeri</i> Ad1668	Vegetables	Seeding 48h 3±2°C	/	3-2-3-1-4	2,6	-	-	4	c
2023	1391	Tapenade d'olives noires	Tapenade of black olives	<i>L. welshimeri</i> Ad1668	Vegetables	Seeding 48h 3±2°C	/	3-2-3-1-4	2,6	+	+	4	c
2023	1392	Olives noires à la grecque	Black olives	<i>L. welshimeri</i> Ad1668	Vegetables	Seeding 48h 3±2°C	/	3-2-3-1-4	2,6	-	-	4	c
2023	1393	Olives vertes dénoyautées	Green olives	<i>L. seeligeri</i> Ad1293	Vegetables	Seeding 48h 3±2°C	/	1-3-2-1-1	1,6	-	-	4	c
2023	1394	Tartinade d'artichaud	Artichoke RTE food	<i>L. seeligeri</i> Ad1293	Vegetables	Seeding 48h 3±2°C	/	1-3-2-1-1	1,6	+	+	4	c
2023	1395	Tartinade de poivrons confits	Pepper RTE food	<i>L. seeligeri</i> Ad1293	Vegetables	Seeding 48h 3±2°C	/	1-3-2-1-1	1,6	+	+	4	c
2023	1460	Salade boulgour, lentilles, potiron	Vegetables salad (bulgur, lentil, pumpkin)	<i>L. monocytogenes</i> Ad285	Vegetables	Seeding 48h 3±2°C	/	2-2-3-3-1	2,2	+	+	4	c
2023	1461	Salade lentilles, oignons	Vegetables salad (lentil, onions)	<i>L. monocytogenes</i> Ad532	Vegetables	Seeding 48h 3±2°C	/	3-1-3-4-0	2,2	+	+	4	c
2023	1462	Carottes râpées citronnées	Sliced and seasoned carrots	<i>L. monocytogenes</i> Ad285	Vegetables	Seeding 48h 3±2°C	/	2-2-3-3-1	2,2	-	-	4	c
2023	1463	Macédoine aux 5 légumes	Vegetables macedoine	<i>L. monocytogenes</i> Ad532	Vegetables	Seeding 48h 3±2°C	/	3-1-3-4-0	2,2	+	+	4	c
2023	1464	Tartinade houmous poivrons	Hummus and pepper RTE food	<i>L. monocytogenes</i> Ad285	Vegetables	Seeding 48h 3±2°C	/	2-2-3-3-1	2,2	+	+	4	c
2023	1465	Tartinade houmous	Hummus RTE food	<i>L. monocytogenes</i> Ad532	Vegetables	Seeding 48h 3±2°C	/	3-1-3-4-0	2,2	+	+	4	c
2023	1900	Déchets découpe porc (production saucisse)	Waste, pork meat (production of sausage)	<i>L. welshimeri</i> Ad1175	RTRH product	Seeding 48h 3±2°C	/	1-0-0-1-0	0,4	+	+	6	a
2023	1901	Déchets découpe porc (production saucisse)	Waste, pork meat (production of sausage)	<i>L. innocua</i> Ad1230	RTRH product	Seeding 48h 3±2°C	/	1-0-0-2-3	1,2	+	+	6	a
2023	1902	Déchets de plats préparés, riz espagnol (industrie de plats préparés)	Waste, RTRH food with rice (RTRH food industry)	<i>L. innocua</i> Ad1230	RTRH product	Seeding 48h 3±2°C	/	1-0-0-2-3	1,2	+	+	6	a
2023	1903	Déchets de plats préparés, sauce champignons (industrie de plats préparés)	Waste, RTRH food with mushrooms sauce (RTRH food industry)	<i>L. monocytogenes</i> Ad1179 <i>L. welshimeri</i> Ad1175	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-0-1-0-0 1-1-1-0-0	0,4 0,6	+	+	6	a
2023	1904	Déchets de plats préparés, crêpes bretonnes (industrie de plats préparés)	Waste, RTRH food pancake (RTRH food industry)	<i>L. monocytogenes</i> Ad1179 <i>L. welshimeri</i> Ad1175	RTRH product/RTRH product	Seeding 48h 3±2°C	/	1-0-1-0-0 1-1-1-0-0	0,4 0,6	+	+	6	a
2023	2398	Déchet produit carné (production de jambon saumuré)	Waste, meat product (production of ham)	<i>L. monocytogenes</i> Ad2856	Meat product	Seeding 48h 3±2°C	/	0-0-0-0-0	0	+	+	6	a
2023	2399	Déchet produit carné (production de chipolatas)	Waste, meat product (production of sausage)	<i>L. monocytogenes</i> Ad2856	Meat product	Seeding 48h 3±2°C	/	0-0-0-0-0	0	-	-	6	a
2023	2400	Déchet produit carné (production de jambon saumuré)	Waste, meat product (production of ham)	<i>L. monocytogenes</i> Ad2856	Meat product	Seeding 48h 3±2°C	/	0-0-0-0-0	0	+	+	6	a
2023	2401	Déchet produit carné (production de chipolatas)	Waste, meat product (production of sausage)	<i>L. monocytogenes</i> Ad2856	Meat product	Seeding 48h 3±2°C	/	0-0-0-0-0	0	-	-	6	a
2023	2258	Eau de rinçage (production steak végétal + nuggets)	Rinse water (production of vegetable steak)	<i>L. monocytogenes</i> Ad2599	Environmental sample	Spiking Heat treatment 56°C 10min (in BHI)	0,5	1-4-2-3-2	2,4	+	+	6	b



Year of analysis	N° Sample	Product (French name)	Product	Artificial contaminations						Global result <i>Listeria</i> spp.		Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample		CFX96 Touch™ (standard)	AriaMx™		
								Enumeration	Mean				
2023	2260	Eau de rinçage (production porc saumuré jambon)	Rinse water (production of pork meat product)	<i>L. monocytogenes</i> Ad2599	Environmental sample	Spiking Heat treatment 56°C 10min (in BHI)	0,5	1-4-2-3-2	2,4	-	-	6	b
2023	2815	Eau de rinçage, mélangeur/batteur zone 1 (production sardines)	Rinse water, blender, zone 1 (production of sardines)	<i>L. monocytogenes</i> Ad2600	Environmental sample	Seeding 48h 3±2°C	/	2-2-1-0-0	1,0	+	+	6	b
2023	1886	Chiffonnette table de travail, après nettoyage (production steak végétal)	Wipe, working table, after cleaning (production of vegetable steak)	<i>L. monocytogenes</i> Ad621	Environmental sample	Seeding 48h 3±2°C	/	1-2-2-3-1	1,8	+	+	6	c
2023	1887	Chiffonnette paillasse, après nettoyage (production steak végétal)	Wipe, working table, after cleaning (production of vegetable steak)	<i>L. monocytogenes</i> Ad621	Environmental sample	Seeding 48h 3±2°C	/	1-2-2-3-1	1,8	+	+	6	c
2023	1888	Chiffonnette raclette, après nettoyage (industrie de plats préparés)	Wipe, after cleaning (RTRH food industry)	<i>L. monocytogenes</i> Ad621	Environmental sample	Seeding 48h 3±2°C	/	1-2-2-3-1	1,8	-	+	6	c
2023	1889	Chiffonnette bac gris, après nettoyage (industrie de plats préparés)	Wipe, after cleaning (RTRH food industry)	<i>L. monocytogenes</i> Ad634	Environmental sample	Seeding 48h 3±2°C	/	2-2-3-1-2	2,0	+	+	6	c
2023	1890	Chiffonnette seau blanc, après nettoyage (industrie de plats préparés)	Wipe, after cleaning (RTRH food industry)	<i>L. monocytogenes</i> Ad634	Environmental sample	Seeding 48h 3±2°C	/	2-2-3-1-2	2,0	+	+	6	c
2023	1891	Chiffonnette tapis étripage, après nettoyage (industrie de produits de la mer)	Wipe, after cleaning (RTRH food industry)	<i>L. monocytogenes</i> Ad621 <i>L. seeligeri</i> Ad3277	Environmental sample/Environmental sample	Seeding 48h 3±2°C	/	1-2-1-0-1 1-1-0-2-0	1,0 0,8	+	+	6	c
2023	1892	Eponge tapis emboitage, après nettoyage (industrie de produits de la mer)	Sponge, after cleaning (seafood industry)	<i>L. monocytogenes</i> Ad621 / <i>L. seeligeri</i> Ad3277	Environmental sample/Environmental sample	Seeding 48h 3±2°C	/	2-0-2-1-1 1-1-0-2-0	1,2 0,8	+	+	6	c
2023	1893	Eponge plateau, après nettoyage (industrie de produits de la mer)	Sponge, after cleaning (seafood industry)	<i>L. monocytogenes</i> Ad634 <i>L. welshimeri</i> Ad1276	Environmental sample/Environmental sample	Seeding 48h 3±2°C	/	2-0-2-1-1 2-0-1-2-0	1,2 1,0	+	+	6	c
2023	2402	Chiffonnette cutter avant nettoyage (production chipolatas)	Wipe, before cleaning, cutter (production of sausage)	<i>L. monocytogenes</i> Ad2453	Meat product	Seeding 48h 3±2°C	/	0-0-0-1-0	0,2	-	-	6	c
2023	2403	Chiffonnette hall avant nettoyage (production chipolatas)	Wipe, before cleaning, hall (production of sausage)	<i>L. monocytogenes</i> Ad2453 <i>L. innocua</i> Ad1207	Environmental samples / Environmental samples	Seeding 48h 3±2°C	/	0-1-0-0-0 1-0-0-1-1	0,2 0,6	+	+	6	c
2023	2404	Chiffonnette cutter avant nettoyage (production chipolatas)	Wipe, before cleaning, cutter (production of sausage)	<i>L. monocytogenes</i> Ad549	Environmental samples	Seeding 48h 3±2°C	/	3-1-0-0-1	1,0	+	+	6	c
2023	2405	Chiffonnette table avant nettoyage (production chipolatas)	Wipe, before cleaning, working table (production of sausage)	<i>L. monocytogenes</i> Ad549	Environmental samples	Seeding 48h 3±2°C	/	3-1-0-0-1	1,0	-	-	6	c
2023	2813	Ecouvillon, épineuse (industrie de produits de la mer)	Swab, instrument (seafood industry)	<i>L. monocytogenes</i> Ad2600	Environmental sample	Seeding 48h 3±2°C	/	2-2-1-0-0	1,0	+	+	6	c
2023	2817	Ecouvillon étaleur (production pâte fine)	Swab, instrument to spread (production of paste)	<i>L. monocytogenes</i> Ad2503	Environmental sample	Seeding 48h 3±2°C	/	1-2-2-0-1	1,2	+	+	6	c
2023	2818	Ecouvillon plan de travail (production de mousse de foie de porc)	Swab, working table (production of pork pâté)	<i>L. monocytogenes</i> Ad2503	Environmental sample	Seeding 48h 3±2°C	/	1-2-2-0-1	1,2	+	+	6	c

Year of analysis	N° Sample	Product (French name)	Product	Artificial contaminations						Global result <i>Listeria</i> spp.		Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample		CFX96 Touch™ (standard)	AriaMx™		
								Enumeration	Mean				
2023	2819	Ecouvillon mélangeur (production de mousse de foie de porc)	Swab, mixer (production of pork pâté)	<i>L. monocytogenes</i> Ad2503	Environmental sample	Seeding 48h 3±2°C	/	1-2-2-0-1	1,2	+	+	6	c



**Appendix 11 – Sensitivity study: raw data -  
(Enrichment step using the BACGro ULTRA Listeria Broth (BULB))  
(Extension study, 2023)**

**Bold typing : artificially inoculated samples**

**Listeria detection results:**

H+:	characteristic Listeria colonies with halo
H-:	characteristic Listeria colonies without halo
-:	no typical colonies but presence of background microflora
st:	plate without any colony
PA:	positive agreement
NA:	negative agreement
ND:	negative deviation
PD:	positive deviation
PPNA:	positive presumptive negative agreement
PPND :	positive presumptive negative deviation
NC:	non characteristic colony on TSYEA
d:	doubtful colony
*:	result after enrichment broth dilution at 1:5
**:	result after enrichment broth dilution at 1:10
NI:	no identification
ni :	not isolated colony
Q:	questionable result
Lmono	<i>Listeria monocytogenes</i>
RTE	Ready To Eat
RTRH	Ready To Reheat
RLM	RAPID' <i>L.mono</i>

COMPOSITE FOODS / READY-TO-EAT AND READY-TO-REHEAT											
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 ♦						Category	Type
				Half Fraser		Fraser		Identification	Listeria spp final result		
				O&A	Palcam	O&A	Palcam				
2023	327	Pépites de fromage panées ail et fines herbes	RTE breaded cheese with garlic and aromatic herbs	st	-	st	-	/	-	1	a
2023	337	Houmous citron confit	Houmous with candied lemon	-	-	st	st	/	-	1	a
2023	1042	Ktipiti (feta, poivron grillé et feuilles de menthe)	Ktipiti (cheese, pepper and mint)	-	-	-	-	/	-	1	a
2023	1045	Guacamole	Guacamole	-	-	st	-	/	-	1	a
2023	1385	Piémontaise au jambon	Piemontaise with ham	H+	+	H+	+	<i>L. mono</i>	+	1	a
2023	1386	Piémontaise au jambon	Piemontaise with ham	H+	+	H+	+	<i>L. mono</i>	+	1	a
2023	1387	Piémontaise au jambon	Piemontaise with ham	H+	+	H+	+	<i>L. mono</i>	+	1	a
2023	1852	Houmous citron menthe	RTE hummus	-	-	-	-	/	-	1	a
2023	1873	Sandwich saumon salade pain de mie complet	Sandwich with salmon, salad, wholemeal bread	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	1	a
2023	1874	Sandwich jambon beurre pain de mie complet	Sandwich with ham, butter, wholemeal bread	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	1	a
2023	1875	Club sandwich poulet rôti mayonnaise avec farine complète	Sandwich with roasted chicken meat, mayonnaise, wholemeal bread	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	1	a
2023	1876	Club sandwich Emmental crudités avec farine complète	Sandwich with cheese, vegetables, wholemeal bread	st	st	-	st	/	-	1	a
2023	1877	Mini farfalles au thon tomate ail et ciboulette	Pasta salad with tuna, tomatoes and garlic	-	-	-	-	/	-	1	a
2023	1878	Salade fusilli et jambon cuit comté tomates cerises et vinaigre balsamique	Pasta salad with cooked ham, tomatoes	-	-	st	-	/	-	1	a
2023	1879	Salade Manhattan, crudités œuf poulet rôti carottes et fromage	Salad with vegetables, eggs, chicken meat, carrot and cheese	st	st	st	st	/	-	1	a
2023	2151	Apéritif olives, feta, tomates séchées, origan	Olives with cheese and tomatoes	H+	+	H+	+	<i>L. mono</i>	+	1	a
2023	2152	Mini roulé coppa, fromage de vache et ricotta	RTE ham with cheese	H+	-	H+	+	<i>L. mono</i>	+	1	a
2023	2153	Petits poivrons farcis, fromage de vache et ricotta	RTE pepper with cheese	st	-	st	-	/	-	1	a
2023	2154	Salade jambon sec, chèvre et sauce vinaigrette	Salad with ham, cheese and sauce	H+	+	H+	+	<i>L. mono</i>	+	1	a
2023	2155	Salade océane, thon, œuf, sauce cocktail	Salad with tuna, eggs and sauce	st	st	st	st	/	-	1	a
2023	2156	Sandwich thon crudités avec pain de mie complet	Salad with tuna, vegetables, wholemeal bread	H+(1)	-	-	-	<i>L. mono</i>	+	1	a
2023	2157	Sandwich poulet, crudités, baguette viennoise	Sandwich with chicken meat and vegetables	-	-	-	-	/	-	1	a
2023	2158	Wrap poulet rôti façon fajitas sauce salsa	Wrap sandwich with sauce	H+/H-	-	H+/H-	+	<i>L. mono</i> <i>L. grayi</i>	+	1	a
2023	2159	Wrap falafel tomates salade	Wrap sandwich with falafel, tomatoes and salad	-	-	-	-	/	-	1	a
2023	325	Paillason de légumes	RTRH food with vegetables	H+	+	H+	+	<i>L. mono</i>	+	1	b
2023	336	Galette de soja à la provençale	Soya galette with tomatoes and aromatic herbs	st	st	st	st	/	-	1	b
2023	578	Galette soja tomate basilic	Soya cake with tomato and basil	-	-	-	-	/	-	1	b
2023	580	Paillason légumes et fromage	RTRH food with vegetables and cheese	H+	+	H+	+	<i>L. mono</i>	+	1	b
2023	836	Paillason légumes et fromage	RTRH food with vegetables and cheese	st	-	st	-	/	-	1	b
2023	1035	Samoussa poulet	Chicken samoussa	st	st	H-	+	<i>L. innocua</i>	+	1	b
2023	1342	Ecrasé portionnable thym seigle	RTRH food with potatoes, thyme, rye	H+	+	H+	+	<i>L. mono</i>	+	1	b
2023	1346	Epinard haché à la crème	Sliced spinach with cream	H+	+	H+	+	<i>L. mono</i>	+	1	b
2023	1481	Palets de courgettes avec fromage	Zucchini cake with cheese	-	-	H-d	+	<i>L. seeligeri</i>	+	1	b
2023	1674	Knack végétal fumée et cuite	Cooked and smoked vegetable sausage	st	st	st	st	/	-	1	b
2023	1675	Feuilleté au jambon et fromage	RTRH food with ham and cheese	-	-	-	st	/	-	1	b
2023	1854	Effeillé de pomme de terre, oignons rouges tomates séchées cuit surgelé	Cooked and frozen RTRH food with potatoes, onions, tomatoes	-	-	-	-	/	-	1	b

♦ Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene Listeria spp.

COMPOSITE FOODS / READY-TO-EAT AND READY-TO-REHEAT											
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 *						Category	Type
				Half Fraser		Fraser		Identification	Listeria spp final result		
				O&A	Palcam	O&A	Palcam				
2023	1916	Pizza 4 fromages	Pizza, 4 cheeses	H+(25)	+	H+	+	<i>L. mono</i>	+	1	b
2023	1917	Pizza jambon fromage	Pizza with ham and cheese	H-(7)	+(3)	H-	+	<i>L. innocua</i>	+	1	b
2023	1918	Quiche aux trois fromages (emmental, reblochon, chèvre)	Cheese pie	H+	+	H+	+	<i>L. mono</i>	+	1	b
2023	1919	Couscous à la marocaine poulet et merguez	Couscous	H-	+	H-	+	<i>L. innocua</i>	+	1	b
2023	1920	Couscous royal aux 3 viandes	Couscous with 3 meats	st	st	st	st	/	-	1	b
2023	2623	Quiche lorraine aux lardons fumés et crème fraiche	Pie with smoked pork meat and cream	st	-	st	-	/	-	1	b
2023	2624	Tresse jambon emmental, pâte feuilletée pur beurre	RTRH food with puff paste ham and cheese	st	st	st	-	/	-	1	b
2023	2625	Pizza jambon/fromage	Pizza with ham and cheese	st	-	-	-	/	-	1	b
2023	2626	Roulé aux 3 fromages	RTRH with puff paste and 3 cheeses	st	-	-	-	/	-	1	b
2023	586	Croissant	Croissant	st	st	st	st	/	-	1	c
2023	939	Flan à la part	Pastry flan	H-	+	H-	+	<i>L. innocua</i>	+	1	c
2023	940	Flan pâtissier	Pastry flan	H-	+	H-	+	<i>L. innocua</i>	+	1	c
2023	941	Tortilla espagnole moelleuse à l'oignon	Omelette (with onions)	st	st	st	-	/	-	1	c
2023	942	Tortilla espagnole aux pommes de terre	Omelette (with potatoes)	st	-	st	-	/	-	1	c
2023	943	Coupe bavaroise aux fraises	Pastry with strawberries	st	st	st	st	/	-	1	c
2023	944	Paris Brest	Pastry with custard	H-	+	H-	+	<i>L. innocua</i>	+	1	c
2023	945	Eclair vanille	Pastry with custard (vanilla)	H-	+	H-	+	<i>L. innocua</i>	+	1	c
2023	1043	Suisse chocolat 21%	Pastry with chocolate (21%)	-	-	-	-	/	-	1	c
2023	1853	Pain aux raisins	Raisin bread	st	-	H+	+	<i>L. mono</i>	+	1	c
2023	1880	Flan pâtissier	Pastry flan	H+	+	H+	+	<i>L. mono</i>	+	1	c
2023	1881	Choux chantilly	Pastry with Chantilly	H+	+	H+	+	<i>L. mono</i>	+	1	c
2023	1882	Choux à la crème	Pastry with cream	-	-	st	-	/	-	1	c
2023	1883	Tarte Tropézienne	Pastry with cream	H+	+	H+	+	<i>L. mono</i>	+	1	c
2023	1884	Tortilla espagnole avec pommes de terre	Omelette with potatoes	-	-	st	-	/	-	1	c
2023	1885	Tortilla fraiche aux oignons	Omelette with onions	st	-	-	-	/	-	1	c
2023	2250	Flan aux œufs cuit et doré au four	Pastry flan	H+	-	H+	+	<i>L. mono</i>	+	1	c
2023	2251	Eclair café	Pastry, with cream flavour coffee	H+	-	H+	+	<i>L. mono</i>	+	1	c
2023	2252	Fraisier	Pastry with cream and strawberry	-	-	H+	+	<i>L. mono</i>	+	1	c
2023	2253	Choux Chantilly	Pastry with Chantilly	H+	-	H+	+	<i>L. mono</i>	+	1	c
2023	2627	Barre chocolatée avec biscuit caramel	Confectionary with chocolate and caramel	-	-	-	-	/	-	1	c
2023	2628	Barre chocolatée avec caramel	Confectionary with caramel	-	-	-	-	/	-	1	c
2023	2629	Religieuse chocolat	Pastry with chocolate	-	-	-	-	/	-	1	c
2023	2630	Fraisier	Pastry with cream and strawberry	-	-	st	-	/	-	1	c
2023	2631	Flan cuit et doré au four	Pastry flan	st	-	st	-	/	-	1	c
2023	276	Viande de poulet crue	Raw chicken meat	H+	+	H+	+	<i>L. mono</i>	+	2	a

## MEAT PRODUCTS

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 ♦						Category	Type
				Half Fraser		Fraser		Identification	Listeria spp final result		
				O&A	Palcam	O&A	Palcam				
2023	277	Steak haché de volaille	Raw ground poultry	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	2	a
2023	280	Cuisse de poulet	Chicken leg meat	H-	+	H-	+	<i>L. innocua</i>	+	2	a
2023	282	Viande rouge avec peau	Raw red meat	H+	+	H+	+	<i>L. mono</i>	+	2	a
2023	285	Cuisse de coq	Raw rooster meat	st	st	st	st	/	-	2	a
2023	286	Steak haché de volaille	Raw ground poultry	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	2	a
2023	288	Steak haché de volaille	Raw ground poultry	H+	+	H+	+	<i>L. mono</i>	+	2	a
2023	295	Viande crue de dinde	Raw poultry meat	H-d/H-	-	-	-	<i>L. innocua</i>	+	2	a
2023	328	Steak de poulet	Chicken meat	d(3)(NC)	-	st	-	/	-	2	a
2023	331	Cuisse de dinde	Poultry leg meat	H-	+	H-	+	<i>L. welshimeri</i>	+	2	a
2023	332	Steak haché de volaille	Raw ground poultry meat	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	2	a
2023	431	Steak haché de bœuf	Raw ground beef meat	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	2	a
2023	434	Steak haché de volaille	Raw ground poultry meat	st	st	st	st	/	-	2	a
2023	582	Haut de cuisse de dinde	Raw poultry meat	H+ni/H-	+	H+dni/H-dni	+	<i>L. mono</i> <i>L. innocua</i>	+	2	a
2023	583	Sauté de dinde	Raw poultry meat	H-	+	H-	+	<i>L. innocua</i>	+	2	a
2023	834	Poulet au citron cru	Raw chicken meat	-	-	-	st	/	-	2	a
2023	2262	Viande bovine rumsteak à griller surgelée	Raw beef meat	H-	+	H-	+	<i>L. welshimeri</i>	+	2	a
2023	2263	Viande d'agneau, gigo à griller, surgelée	Raw lamb meat	st	st	st	st	/	-	2	a
2023	2264	Viande de veau escalope à griller surgelée	Raw veal meat	st	st	st	st	/	-	2	a
2023	2265	Aiguillettes de poulet surgelées	Frozen raw chicken meat	st	st	st	st	/	-	2	a
2023	2266	Viande bovine, charolais	Raw beef meat	st	st	st	st	/	-	2	a
2023	2267	Filet de canard façon tournedos	Raw duck meat	H+	+	H+	+	<i>L. mono</i>	+	2	a
2023	2268	Escalope de veau à griller	Raw veal meat	st	st	st	st	/	-	2	a
2023	2269	Filet de dinde	Raw poultry meat	-	-	-	st	/	-	2	a
2023	2725	Gigot d'agneau, tranche à griller	Raw lamb meat	st	-	st	st	/	-	2	a
2023	2726	Viande bovine, steak à griller	Raw beef meat	st	-	st	-	/	-	2	a
2023	2727	Escalope de veau à griller	Raw veal meat	-	-	st	st	/	-	2	a
2023	275	Cubes de filet de poulet mariné forestier rôti	Seasoned roasted chicken meat	st	st	st	st	/	-	2	b
2023	278	Ailes de poulet rôti	Roasted chicken wings	H-	+	H-	+	<i>L. innocua</i>	+	2	b
2023	284	Porc au curry	Cooked pork meat with curry	H+	+	H+	+	<i>L. mono</i>	+	2	b
2023	291	Poulet façon fajitas	Cooked chicken meat (fajitas)	st	st	-	-	/	-	2	b
2023	294	Porc au curry	Cooked pork meat with curry	H+	+	H+	+	<i>L. mono</i>	+	2	b
2023	326	Escalope poulet pané	Breaded chicken cutlet	H+	+	H+	+	<i>L. mono</i>	+	2	b
2023	432	Emincés de poulet mariné au citron (cuit)	Seasoned chicken meat (with lemon)	st	st	st	st	/	-	2	b
2023	433	Ailes de poulet pimentées	Seasoned chicken wings	st	-	st	-	/	-	2	b
2023	1029	Nuggets de dinde cuit	Poultry nuggets	st	st	st	st	/	-	2	b
2023	1041	Poitrine de porc fumée	Smoked pork meat	st	st	st	st	/	-	2	b
2023	1905	<b>Bœuf bourguignon</b>	<b>Cooked beef meat</b>	st	st	st	st	/	-	2	b

♦ Analyses performed according to the COFRAC accreditation

MEAT PRODUCTS											
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 *						Category	Type
				Half Fraser		Fraser		Identification	Listeria spp final result		
				O&A	Palcam	O&A	Palcam				
2023	1906	Blanquette de veau	Cooked veal meat	st	st	st	st	/	-	2	b
2023	1907	Lapin chasseur	Cooked rabbit meat	H+	+	H+	+	<i>L. mono</i>	+	2	b
2023	1908	Poulet basquaise au piment du Pays Basque	Cooked chicken meat	H+	+	H+	+	<i>L. mono</i>	+	2	b
2023	1909	Roti de porc, RTRH	Cooked pork meat	H+	+	H+	+	<i>L. mono</i>	+	2	b
2023	2270	Saucisse de Toulouse aux lentilles vertes	RTRH food with pork meat	st	st	st	st	/	-	2	b
2023	2271	Poulet basquaise	RTRH food with chicken meat	st	st	st	st	/	-	2	b
2023	2272	Bœuf bourguignon	RTRH food with beef meat	st	st	st	st	/	-	2	b
2023	2274	Sauté de veau et ses petits légumes au jus de citron	RTRH food with veal meat	st	st	st	st	/	-	2	b
2023	2633	Veau marenge	RTRH food with veal meat	st	st	st	st	/	-	2	b
2023	2820	Bœuf sauce au poivre	RTRH beef meat with pepper	-	st	H-d	st	-	-	2	b
2023	279	Saucisse de Strasbourg (sel réduit)	Sausage (Strasbourg)	st	st	st	st	/	-	2	c
2023	281	Jambon de Vendée à l'ancienne	Cooked ham	st	st	st	st	/	-	2	c
2023	283	Saucisse de ferme crue	Raw sausage	-	st	-	st	/	-	2	c
2023	287	Boudin noir	Blood sausage	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	2	c
2023	289	Pâté à l'ail	Pâté with garlic	st	st	st	st	/	-	2	c
2023	290	Saucisson aux cèpes	Sausage with mushrooms	-	st	-	st	/	-	2	c
2023	292	Saucisse knacki	Knack sausage	-	st	st	st	/	-	2	c
2023	293	Saucisse de poulet	Chicken sausage	st	st	-	-	/	-	2	c
2023	296	Saucisse au muscadet	Sausage with muscadet	sr	st	st	st	/	-	2	c
2023	329	Saucisse de poulet fromage	Chicken sausage with cheese	st	st	st	st	/	-	2	c
2023	333	Lardons fumés cuits	Cooked smoked bacon	st	st	st	st	/	-	2	c
2023	584	Chorizo fumé	Smoked chorizo	H+	+	H+	+	<i>L. mono</i> <i>L. welshimeri</i>	+	2	c
2023	835	Saucisse de Strasbourg	Sausage (Strasbourg)	st	st	st	st	/	-	2	c
2023	1034	Saucisse Ouessant fumée à la motte	Smoked sausage	H-	-	H-	+	<i>L. welshimeri</i>	+	2	c
2023	1048	Jambon cuit supérieur en dès	Cooked and sliced ham	H+	+	H+	+	<i>L. mono</i>	+	2	c
2023	1189	Merguez	Merguez	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	2	c
2023	1191	Chorizo fumé pur porc	Smoked chorizo	H-	-	H-	+	<i>L. welshimeri</i>	+	2	c
2023	1478	Pâté de campagne maison	Farmer's pâté	H+	+	H+	+	<i>L. mono</i>	+	2	c
2023	1484	Saucisse de Strasbourg supérieure	Sausage (Strasbourg)	H+	+	H+	+	<i>L. mono</i>	+	2	c
2023	1657	Merguez piquante	Spicy merguez	H+/H-	-	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	2	c
2023	1658	Chorizo fumé	Smoked chorizo	-	-	-	-	/	-	2	c
2023	1659	Merguez tunisienne	Tunisian merguez	H+	-	H+	-	<i>L. mono</i>	+	2	c
2023	1660	Saucisse d'agneau	Lamb sausage	-	-	-	-	/	-	2	c
2023	1673	Chorizo fumé pur porc	Smoked chorizo	H-	+	H-	+	<i>L. innocua</i>	+	2	c
2023	1676	Merguez	Merguez	H+/H-	-	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	2	c



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2023	429	Fromage pâte persillée au lait cru de brebis	Raw ewe milk cheese	st	st	st	st	/	-	3	a
2023	435	Fromage pâte persillée au lait cru de brebis	Raw ewe milk cheese	st	st	st	st	/	-	3	a
2023	436	Fromage pâte persillée au lait cru de brebis	Raw ewe milk cheese	st	st	st	st	/	-	3	a
2023	838	Camembert au lait cru	Raw cow milk cheese	H-	+	H-	+	<i>L. innocua</i>	+	3	a
2023	839	Camembert au lait cru	Raw cow milk cheese	-	-	st	st	/	-	3	a
2023	841	Brie de Meaux au lait cru	Raw cow milk cheese	st	-	st	-	/	-	3	a
2023	842	Maroilles fermier au lait cru de vache	Raw cow milk cheese	st	-	st	-	/	-	3	a
2023	843	Munster au lait cru de vache	Raw cow milk cheese	-	-	-	-	/	-	3	a
2023	844	Saint Paulin au lait cru	Raw cow milk cheese	-	-	st	st	/	-	3	a
2023	846	Cœur Neufchâtel fermier au lait cru de vache	Raw cow milk cheese	-	-	st	st	/	-	3	a
2023	847	Brie de Meaux au lait cru	Raw cow milk cheese	-	-	st	-	/	-	3	a
2023	848	Tomme de brebis au lait cru	Raw ewe milk cheese	st	st	st	st	/	-	3	a
2023	849	Crottin frais au lait cru	Raw goat milk cheese	st	-	st	st	/	-	3	a
2023	850	Fondant de brebis au lait cru	Raw ewe milk cheese	H-	+	H-	+	<i>L. innocua</i>	+	3	a
2023	851	Reblochon au lait cru	Raw cow milk cheese	-	st	-	-	/	-	3	a
2023	2160	Fromage au lait cru de Brebis Ossau iraty	Raw ewe milk cheese	H+/H-	+	H+/H-	+	<i>L. mono</i> / <i>L. seeligeri</i>	+	3	a
2023	2161	Rocquefort au lait cru de chèvre	Raw goat milk cheese	H+	-	H+/H-	+	<i>L. mono</i> / <i>L. seeligeri</i>	+	3	a
2023	2162	Morbier au lait cru de vache	Raw cow milk cheese	H+	-	H+	+	<i>L. mono</i>	+	3	a
2023	2163	Bethmale au lait cru de vache	Raw cow milk cheese	H-	+	H-	+	<i>L. seeligeri</i>	+	3	a
2023	2164	Rocamadour au lait cru de chèvre	Raw goat milk cheese	H+	-	H+/H-	+	<i>L. mono</i> / <i>L. seeligeri</i>	+	3	a
2023	2165	Chavignol au lait cru de chèvre	Raw goat milk cheese	H+ni/H+	-	H+	+	<i>L. mono</i>	+	3	a
2023	2388	Brie de Meaux au lait cru	Raw cow milk cheese	H+	+	H+	+	<i>L. mono</i>	+	3	a
2023	2389	Tomme de chèvre au lait cru	Raw goat milk cheese	H+	+	H+	-	<i>L. mono</i>	+	3	a
2023	2390	Tomme de brebis au lait cru	Raw ewe milk cheese	H+	+	H+	+	<i>L. mono</i>	+	3	a
2023	2391	Emmental grand cru au lait cru de vache	Raw cow milk cheese	H+ni(1)/H+	-	H+	+	<i>L. mono</i>	+	3	a
2023	2611	Emmental au lait cru	Raw milk cheese	-	st	-	-	/	-	3	a
2023	444	Lait cru de brebis	Raw ewe milk	H+	+	H+	+	<i>L. mono</i>	+	3	b
2023	1855	Lait de brebis	Ewe milk	H+	+	H+	+	<i>L. mono</i>	+	3	b
2023	1856	Lait de brebis	Ewe milk	H+	+	H+	+	<i>L. mono</i>	+	3	b
2023	1857	Lait de brebis	Ewe milk	H+	+	H+	+	<i>L. mono</i>	+	3	b
2023	1864	Lait cru de vache	Raw cow milk	-	st	-	-	/	-	3	b
2023	1865	Lait cru entier de vache jersiaise	Raw cow milk	-	st	-	-	/	-	3	b
2023	1866	Faisselle au lait cru de vache	Raw cow milk	st	-	-	-	/	-	3	b
2023	1867	Crème crue fermière au lait cru de vache	Cream with raw cow milk	st	-	-	-	/	-	3	b
2023	2166	Lait cru fermenté de vache	Raw milk cheese	H+ni/H+	+	H+	+	<i>L. ivanovii</i>	+	3	b
2023	2167	Lait cru de vache jersiaise	Raw milk cheese	-	-	-	-	/	-	3	b
2023	2168	Fromage blanc au lait cru de vache	White cheese with raw cow milk	-	st	-	st	/	-	3	b
2023	2169	Fromage blanc au lait cru de vache	White cheese with raw cow milk	-	st	-	-	/	-	3	b
2023	2170	Crème crue fermière au lait cru de vache	Cream with raw cow milk	st	-	H+	+	<i>L. ivanovii</i>	+	3	b

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2023	2171	Crème crue fermière au lait cru de vache	Cream with raw cow milk	H+ni/H+	+	H+	+	<i>L. mono</i>	+	3	b
2023	2392	Beurre cru de vache, baratte, demi sel	Raw butter with salt	H-	+	H-	+	<i>L. welshimeri</i>	+	3	b
2023	2393	Beurre de baratte au lait cru demi-sel	Butter with raw milk and salt	st	-	-	-	/	-	3	b
2023	2394	Faisselle au lait cru de vache	Cottage cheese with raw cow milk	st	st	st	st	/	-	3	b
2023	2395	Fromage blanc fermier au lait cru entier de vache	White cheese with raw cow milk	-	-	-	-	/	-	3	b
2023	2396	Crème crue	Raw cream	-	-	-	-	/	-	3	b
2023	2397	Crème crue au lait cru de vache	Raw cream with raw cow milk	st	st	-	st	/	-	3	b
2023	2610	Beurre doux à la crème mûré non pasteurisé	Butter with raw milk	H+	-	H+	+	<i>L. mono</i>	+	3	b
2023	845	Brillat savarin au lait pasteurisé	Pasteurized cow milk cheese	-	-	st	st	/	-	3	c
2023	932	Petit basque au lait de brebis pasteurisé (36%MG)	Pasteurized ewe milk cheese (36% FL)	st	-	st	st	/	-	3	c
2023	933	Tomme des Pyrénées au lait de vache pasteurisé (28%MG)	Pasteurized cow milk cheese (28% FL)	H+	+	H+	+	<i>L. mono</i>	+	3	c
2023	934	Bûche de chèvre au lait pasteurisé (23% MG)	Pasteurized goat milk cheese (23% FL)	-	-	-	-	/	-	3	c
2023	935	Riz au lait saveur vanille	Rice pudding (vanilla)	H+	+	H+	+	<i>L. mono</i>	+	3	c
2023	936	Semoule au lait saveur vanille	Milk semolina (vanilla)	H-	+	H-	+	<i>L. innocua</i>	+	3	c
2023	937	Crème fraîche légère épaisse pasteurisée	Pasteurized fresh cream (light)	H+	+	H+	+	<i>L. mono</i>	+	3	c
2023	938	Crème fraîche entière gastronomique pasteurisée	Pasteurized fresh cream (whole)	H-	+	H-	+	<i>L. innocua</i>	+	3	c
2023	1910	Crème fraîche épaisse légère pasteurisée	Pasteurised cream, thick and light	st	+	H-	+	<i>L. seeligeri</i>	+	3	c
2023	1911	Crème fraîche épaisse pasteurisée	Pasteurised cream, thick	H+	+	H+	+	<i>L. mono</i>	+	3	c
2023	1912	Riz au lait vanille	Rice pudding (vanilla)	st	-	st	-	/	-	3	c
2023	1913	Panna cotta et son coulis mangue passion	Panna cotta with fruit sauce	H+	+	H+	+	<i>L. mono</i>	+	3	c
2023	1914	Panna cotta et son coulis caramel au lait	Panna cotta with caramel	st	+	H-	+	<i>L. seeligeri</i>	+	3	c
2023	1915	Lait demi écrémé frais pasteurisé	Pasteurised fresh milk, semi-skimmed milk	H+(9)	+(2)	H+	+	<i>L. mono</i> <i>L. seeligeri</i> (Palcam)	+	3	c
2023	2254	Semoule au lait et à la vanille	Semolina with milk and vanilla	H+	+	H+	+	<i>L. mono</i>	+	3	c
2023	2255	Mozzarella mini	Pasteurised cheese, mozzarella	H+(3)	-	H+	+	<i>L. mono</i>	+	3	c
2023	2256	Mozzarella	Pasteurised cheese, mozzarella	H+	-	H+	+	<i>L. mono</i>	+	3	c
2023	2257	Ricotta	Pasteurised cheese, ricotta	H+	+	H+	+	<i>L. mono</i>	+	3	c
2023	2632	Cheesecake	Cheesecake	-	-	-	-	/	-	3	c
2023	2634	Riz au lait saveur vanille	Rice pudding (vanilla)	st	st	st	st	/	-	3	c
2023	2635	Fromage penail au lait de brebis pasteurisé	Pasteurised cheese with ewe milk	-	-	st	-	/	-	3	c
2023	2636	Camembert au lait de vache pasteurisé	Pasteurised cheese with cow milk	st	-	-	-	/	-	3	c
2023	2637	Glace cookie dough	Ice cream, flavour cookie	-	-	-	-	/	-	3	c
2023	2638	Glace chocolat brownies	Ice cream, flavour chocolate brownie	-	-	-	-	/	-	3	c
2023	2639	Glace vanille macademia	Ice cream, flavour vanilla	-	-	st	-	/	-	3	c
2023	2640	Glace peanut butter	Ice cream, peanut butter	st	-	st	-	/	-	3	c

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2023	338	Ciboulette	Chives	st	-	st	-	/	-	4	a
2023	339	Petits pois	Green peas	H+/H-	+	H+/H-	+	L. mono L. innocua	+	4	a
2023	343	Brocolis	Broccoli	H+	+	H+	+	L. mono	+	4	a
2023	577	Petit pois	Peas	-	-	st	-	/	-	4	a
2023	579	Poireaux bio	Organic leek	st	-	-	-	/	-	4	a
2023	1030	Petits pois bio	Organic peas	H+	+	H+	+	L. mono	+	4	a
2023	1172	Graines germées Alfalfa bio	Organic sprouts, Alfalfa	H+	+	H+	+	L. mono	+	4	a
2023	1173	Mélange graines germées (Alfalfa, radis, fenouil)	Sprouts (alfalfa, radish, fennel)	H-	-	H-	-	L. welshimeri	+	4	a
2023	1174	Jeunes pousses mélange mesclun	Baby leaves (mix)	H+	+	H+	+	L. mono	+	4	a
2023	1175	Jeunes pousses mâche	Baby leaves (lamb's lettuce)	st	-	st	st	/	-	4	a
2023	1176	Epinards frais	Fresh spinach	H-	+	H-	-	L. welshimeri	+	4	a
2023	1177	Epinards frais à cuire	Fresh spinach	H-d	-	-	-	L. seeligeri	+	4	a
2023	1335	Haricots verts très fins surgelés	Frozen green beans	-	-	-	-	/	-	4	a
2023	1337	Ciboulette	Chives	-	-	st	st	/	-	4	a
2023	1341	Persil frisé	Curled p	-	-	-	-	/	-	4	a
2023	1345	Persil plat	Parsley	-	st	st	st	/	-	4	a
2023	1372	Graines germées Alfalfa, radis, fenouil bio	Sprouts (alfalfa, radish, fennel)	H+	+	H+	+	L. mono	+	4	a
2023	1373	Graine germées Alfalfa bio	Sprouts (organic alfalfa)	H+ni/H+	-	H+	+	L. mono	+	4	a
2023	1374	Brocolis	Broccolis	st	st	st	st	/	-	4	a
2023	1375	Céleri branche	Celery stalk	-	-	-	-	/	-	4	a
2023	1376	Navet violet	Purple turnip	H+	+	H+	+	L. mono	+	4	a
2023	1377	Endive	Endive	-	st	st	st	/	-	4	a
2023	1378	Chou	Cabbage	H+	+	H+	+	L. mono	+	4	a
2023	1379	Jeunes pousses tendres (mâche, épinard, laitue verte et rouge)	Baby leaves (lamb's lettuce, spinach, lettuce)	-	-	-	-	/	-	4	a
2023	1476	Champignons entiers congelés	Frozen mushrooms	-	-	st	-	/	-	4	a
2023	1477	Poivrons rouges	Red pepper	H+	+	H+	+	L. mono	+	4	a
2023	2172	Courgette	Zucchini	-	-	-	-	/	-	4	a
2023	2173	Brocolis	Broccolis	-	-	-	-	/	-	4	a
2023	323	Légumes ratatouille	Cooked vegetables	st	-	st	-	/	-	4	b
2023	324	Epinard haché à la crème	Ground spinach with cream	st	-	-	-	/	-	4	b
2023	340	Poêlée parisienne bio	Organic vegetables mix	st	st	st	st	/	-	4	b
2023	341	Pomme de terre saladaise	Cooked potatoes	st	-	st	-	/	-	4	b
2023	342	Printanière de légumes	Vegetables mix	-	-	st	-	/	-	4	b
2023	575	Buttergemuse (légumes au beurre)	Pre-cooked buttergemuse	st	-	st	-	/	-	4	b
2023	576	Aubergine grillée	Grilled eggplant	H+	+	H+	+	L. mono	+	4	b
2023	581	Poivrons jaunes grillés	Roasted yellow bell pepper	st	st	st	st	/	-	4	b
2023	585	Poêlée du soleil tomate basilic	Vegetables mix (with tomato and basil)	H+	+	H+	+	L. mono	+	4	b
2023	840	Légumes vapeur pois épinards	Steamed cooked vegetables (peas and spinach)	H+/H-	+	H+/H-	+	L. mono L. innocua	+	4	b
2023	1033	Palets poireaux carottes brocolis	Vegetables cake (leeks, carrots, broccoli)	H+/H-	+	H+/H-	+	L. mono L. innocua	+	4	b

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2023	1037	Palets de courgettes et petits légumes	Zucchini cake with other vegetables	-	-	-	-	/	-	4	b
2023	1047	Poivrons rouges lanières, blanchi	Cooked and sliced red pepper	-	-	st	-	/	-	4	b
2023	1180	<b>Macédoine de légumes</b>	<b>Vegetable macédoine</b>	H+	+	H+	+	<i>L. mono</i>	+	4	b
2023	1181	<b>Macédoine de légumes</b>	<b>Vegetable macédoine</b>	H+	+	H+	+	<i>L. mono</i>	+	4	b
2023	1184	Julienne de légumes surgelée (carottes, courgettes, concombre, céleri)	Frozen vegetables mix (carrots, zucchini, cucumber, celery)	-	-	-	-	/	-	4	b
2023	1185	Courge butternut en cubes surgelée	Frozen cut butternut	-	-	-	-	/	-	4	b
2023	1186	Légumes pour potage surgelés (choux fleur, carottes, poireaux, céleris, oignons)	Frozen vegetables mix (cauliflower, carrots, celery, onion, leeks)	st	-	-	-	/	-	4	b
2023	1333	Brocolis en fleurette	Sliced and cooked broccoli	st	-	st	-	/	-	4	b
2023	1334	Brunoise méridionale	Pre-cooked vegetables mix	st	-	st	-	/	-	4	b
2023	1336	Mélange de légumes cuits	Cooked vegetables mix	-	-	-	-	/	-	4	b
2023	1338	Mélange de légumes cuits	Cooked vegetables mix	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	4	b
2023	1339	Pomme de terre grenaille beurre sel	Cooked potatoes	-	-	-	-	/	-	4	b
2023	1343	Poêlée parisienne bio	Organic pre-cooked vegetables mix	st	-	st	-	/	-	4	b
2023	1344	Jardinière de légumes	Pre-cooked vegetables mix	st	-	st	-	/	-	4	b
2023	1381	<b>Ratatouille</b>	<b>Ratatouille</b>	H+	+	H+	+	<i>L. mono</i>	+	4	b
2023	1382	<b>Cœur de laitue en sachet</b>	<b>Bagged lettuce</b>	H+	+	H+	+	<i>L. mono</i>	+	4	b
2023	1388	<b>Macédoine de légumes</b>	<b>Vegetable macedoine</b>	H+	+	H+	+	<i>L. mono</i>	+	4	b
2023	330	Guacamole	Guacamole	-	-	st	-	/	-	4	c
2023	1178	<b>Houmous de poivrons</b>	<b>Bell pepper hummus</b>	H-	+	H-	-	<i>L. welshimeri</i>	+	4	c
2023	1179	<b>Guacamole</b>	<b>Guacamole</b>	H-	+	st	st	<i>L. seeligeri</i>	+	4	c
2023	1182	<b>Choux fleur à croquer</b>	<b>Cauliflower ready to eat</b>	H+	+	H+	+	<i>L. mono</i>	+	4	c
2023	1183	<b>Baby carottes à croquer</b>	<b>Baby carrots ready to eat</b>	st	st	st	st	/	-	4	c
2023	1380	<b>Tartare de légumes</b>	<b>Vegetable tartar</b>	H+	+	H+	+	<i>L. mono</i>	+	4	c
2023	1383	<b>Caviar d'aubergine</b>	<b>Eggplant caviar</b>	H+	+	H+	+	<i>L. mono</i>	+	4	c
2023	1384	<b>Caviar d'aubergine</b>	<b>Eggplant caviar</b>	H+	+	H+	+	<i>L. mono</i>	+	4	c
2023	1389	<b>Coleslaw</b>	<b>Coleslaw</b>	H+	+	H+	+	<i>L. mono</i>	+	4	c
2023	1390	<b>Tapenade d'olives vertes</b>	<b>Tapenade of green olives</b>	-	st	st	st	/	-	4	c
2023	1391	<b>Tapenade d'olives noires</b>	<b>Tapenade of black olives</b>	H-	+	H-	+	<i>L. welshimeri</i>	+	4	c
2023	1392	<b>Olives noires à la grecque</b>	<b>Black olives</b>	st	st	st	st	/	-	4	c
2023	1393	<b>Olives vertes dénoyautées</b>	<b>Green olives</b>	st	st	st	st	/	-	4	c
2023	1394	<b>Tartinade d'artichaud</b>	<b>Artichoke RTE food</b>	-	-	st	-	/	-	4	c
2023	1395	<b>Tartinade de poivrons confits</b>	<b>Pepper RTE food</b>	H-d	+	H-	+	<i>L. seeligeri</i>	+	4	c
2023	1460	<b>Salade boulgour, lentilles, potiron</b>	<b>Vegetables salad (bulgur, lentil, pumpkin)</b>	H+	+	H+	+	<i>L. mono</i>	+	4	c
2023	1461	<b>Salade lentilles, oignons</b>	<b>Vegetables salad (lentil, onions)</b>	-	-	-	-	/	-	4	c
2023	1462	<b>Carottes râpées citronnées</b>	<b>Sliced and seasoned carrots</b>	st	-	st	st	/	-	4	c
2023	1463	<b>Macédoine aux 5 légumes</b>	<b>Vegetables macedoine</b>	H+	+	H+	+	<i>L. mono</i>	+	4	c
2023	1464	<b>Tartinade houmous poivrons</b>	<b>Hummus and pepper RTE food</b>	st	-	st	st	/	-	4	c
2023	1465	<b>Tartinade houmous</b>	<b>Hummus RTE food</b>	H+	+	H+	+	<i>L. mono</i>	+	4	c
2023	2728	Tartinade caviar d'aubergines	RTE vegetable, eggplant caviar	st	-	st	st	/	-	4	c
2023	2729	Tartinades tomates confites à l'origan	RTE vegetable, tomatoes with oregano	st	-	st	st	/	-	4	c

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2023	427	Beau filet de colin nature cru	Raw fish filet	H+	-	H+	+	<i>L. mono</i>	+	5	a
2023	437	Pavé de saumon Ecosse	Raw salmon filet (scotish)	st	st	st	st	/	-	5	a
2023	438	Pavé de saumon	Raw salmon filet	st	st	st	st	/	-	5	a
2023	439	Dos de colin d'Alaska nature (cru)	Raw fish filet	H+	+	H+	+	<i>L. mono</i>	+	5	a
2023	588	Crevettes entières	Whole shrimp	st	-	-	-	/	-	5	a
2023	589	Chair grattée de saumon	Raw salmon pulp	H+	+	H+	+	<i>L. mono</i>	+	5	a
2023	590	Dos de colin d'Alaska	Raw fish filet	H+	+	H+	+	<i>L. mono</i>	+	5	a
2023	591	Chair de saumon	Raw salmon pulp	H+	+	H+	+	<i>L. mono</i>	+	5	a
2023	592	Pavé de saumon Ecosse	Raw salmon filet (Scottish)	st	st	-	st	/	-	5	a
2023	1036	Crevettes décortiquées crues	Raw peeled shrimp	-	-	-	-	/	-	5	a
2023	1328	Crevettes crues congelées	Frozen raw shrimp	H-d (2)	-	-	-	NC	-	5	a
2023	1329	Crevettes décortiquées	Raw peeled shrimp	H-	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	5	a
2023	1330	Crevettes décortiquées	Raw peeled shrimp	H-	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	5	a
2023	1482	Tranche de colin nature	Raw fish filet	st	st	st	st	/	-	5	a
2023	1668	Dos d'Eglefin	Fish filet	st	st	st	st	/	-	5	a
2023	1669	Pavé de saumon	Salmon filet	st	st	st	st	/	-	5	a
2023	1671	Cocktail de fruits de mer (encornets, crevettes, moules)	Seafood cocktail	st	st	st	st	/	-	5	a
2023	2174	Noix de Saint Jacques	Scallop	H+	+	H+	+	<i>L. mono</i>	+	5	a
2023	2175	Filet de Merlan	Fish filet	st	-	st	st	/	-	5	a
2023	2176	Filet de Lieu noir	Fish filet	st	st	st	st	/	-	5	a
2023	443	Saumon fumé d'atlantique	Smoked salmon filet	H+(1)	st	H+	+	<i>L. mono</i>	+	5	b
2023	1040	Truite fumée	Smoked trout filet	-	-	-	-	/	-	5	b
2023	1044	Saumon fumé Ecosse	Smoked salmon filet (Scottish)	H-d/H-	+	H-	+	<i>L. welshimeri</i>	+	5	b
2023	1046	Saumon fumé bio	Organic smoked salmon filet	H-d/H-	+	H-	+	<i>L. welshimeri</i>	+	5	b
2023	1187	Saumon fumé de Norvège	Smoked salmon (Norway)	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	5	b
2023	1190	Saumon fumé Ecosse Irlande bio	Organic smoked salmon	st	st	st	st	/	-	5	b
2023	1192	Filet de saumon fumé Norvège	Smoked salmon (Norway)	-	-	st	-	/	-	5	b
2023	1331	Saumon fumé norvégien en tranche	Sliced smoked salmon	-	-	-	st	/	-	5	b
2023	1661	Truite fumée des Pyrénées	Smoked trout	st	st	st	st	/	-	5	b
2023	1850	Truite fumée Bretagne	Smoked trout	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	5	b
2023	1851	Saumon fumé	Smoked salmon	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	5	b
2023	1858	Lardons de saumon fumé	Smoked sliced salmon	-	st	st	st	/	-	5	b
2023	1859	Saumon fumé élevé en Norvège	Smoked salmon	-	-	-	-	/	-	5	b
2023	1860	Truite fumée Bretagne	Smoked trout	st	st	st	st	/	-	5	b
2023	1861	Truite fumée mini tranches	Smoked sliced trout	st	-	st	-	/	-	5	b
2023	1862	Filet de harengs fumé doux	Smoked herring	st	+	H-(1)	+	<i>L. seeligeri</i>	+	5	b
2023	1863	Filet de harengs fumé classique	Smoked herring	st	st	-	-	/	-	5	b

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2023	2177	Brisures de saumon fumé au bois de hêtre	Smoked salmon	-	-	st	st	/	-	5	b
2023	2178	Truite fumée en mini-tranches	Smoked sliced trout	H-	+	H-	+	<i>L. welshimeri</i>	+	5	b
2023	2179	Filet de harengs fumés au bois de hêtre (doux)	Smoked herring	st	-	st	-	/	-	5	b
2023	2408	Truite fumée	Smoked trout	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	5	b
2023	2409	Truite fumée, Pyrénées	Smoked trout	st	st	st	st	/	-	5	b
2023	2410	Saumon fumé Ecosse Label rouge	Smoked salmon	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	5	b
2023	2411	Saumon fumé Ecosse	Smoked salmon	H+	+	H+	+	<i>L. mono</i>	+	5	b
2023	2412	Saumon fumé chair crue	Smoked salmon	H+d/H-	+	H-	+	<i>L. mono</i> <i>L. innocua</i>	+	5	b
2023	334	Filet merlu sauce vierge	Cooked fish with sauce	st	-	-	-	/	-	5	c
2023	335	Pané de cabillaud bio	Breaded organic fish	H+	+	H+	+	<i>L. mono</i>	+	5	c
2023	424	Crevettes cuites entières décortiquées	Peeled whole cooked shrimp	H+	+	H+	+	<i>L. mono</i>	+	5	c
2023	425	Portion de lieu noir cuit	RTRH fish filet	st	st	st	st	/	-	5	c
2023	426	Aiguillettes de colin pané	RTRH breaded fish filet	H-	-	H-	+	<i>L. innocua</i>	+	5	c
2023	428	Paupiette de saumon	RTRH salmon filet	st	-	st	st	/	-	5	c
2023	430	Coquilles Saint Jacques	RTRH scallop	-	-	-	-	/	-	5	c
2023	440	Pavé de poisson blanc cuit sauce napolitaine	RTRH fish filet (Neapolitan sauce)	-	-	st	-	/	-	5	c
2023	441	Dos de colin d'Alaska nature (cuit)	Cooked fish filet	H+	+	H+	+	<i>L. mono</i>	+	5	c
2023	442	Crevettes cuites entières	Whole cooked shrimp	st	-	-	-	/	-	5	c
2023	587	Queues de crevettes pannées	Breaded shrimp tail	st	-	st	-	/	-	5	c
2023	593	Pavé colin topping napolitain précuit	RTRH fish filet (Neapolitan sauce)	-	-	st	-	/	-	5	c
2023	594	Pavé colin topping épinard	RTRH fish filet (spinach sauce)	st	-	-	-	/	-	5	c
2023	833	Colin pané	Breaded fish filet	st	-	st	-	/	-	5	c
2023	1031	Brochette de poisson pané	Breaded fish filet	-	-	st	-	/	-	5	c
2023	1032	Filet de truite meunière	RTRH fish filet (with sauce)	st	st	st	st	/	-	5	c
2023	1188	Brochette de poisson pané	Breaded fish filet	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	5	c
2023	1332	Filet de truite meunière bio	RTRH fish filet with sauce	-	-	st	st	/	-	5	c
2023	1466	Filet de poisson pané	Breaded fish filet	H+	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	5	c
2023	1467	Filet de poisson pané	Breaded fish filet	H+	+	H+	+	<i>L. mono</i>	+	5	c
2023	1483	Dos de colin d'Alaska nature cuit	Cooked fish filet	H+	+	H+	+	<i>L. mono</i>	+	5	c
2023	1670	Moules à la marinière et pomme de terre	RTRH seafood (mussels with potatoes)	-	-	-	-	/	-	5	c
2023	2730	Surimi en bâtonnets	RTE fish product, surimi	st	st	st	st	/	-	5	c
2023	2731	Bâtonnets saveur crabe	RTE fish product, surimi	st	st	st	st	/	-	5	c

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2023	832	Déchets production saumon (industrie de produits de la mer)	Waste, salmon filet (Seafood industry)	H+/H-	+	H+	+	<i>L. mono</i> <i>L. innocua</i>	+	6	a
2023	1038	Chute de parage saumon (industrie de produits de la mer)	Waste, salmon (Seafood industry)	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	6	a
2023	1039	Déchets de porc ramassés au sol (industrie de produits carnés)	Waste, pork meat (meat products industry)	H+(1)	-	H+(6)	+	<i>L. mono</i>	+	6	a
2023	1662	Déchet de production Morue (industrie de produits de la mer)	Waste, fish (seafood industry)	-	-	H+	+	<i>L. mono</i>	+	6	a
2023	1663	Déchet de production Brandade sous doseuse (industrie de produits de la mer)	Waste, fish (seafood industry)	H+	+	H+	+	<i>L. mono</i>	+	6	a
2023	1664	Déchet de production merlu pomme de terre cidre (industrie de produits de la mer)	Waste, fish and potatoes (seafood industry)	-	-	-	-	/	-	6	a
2023	1900	<b>Déchets découpe porc (production saucisse)</b>	<b>Waste, pork meat (production of sausage)</b>	st	st	st	st	/	-	6	a
2023	1901	<b>Déchets découpe porc (production saucisse)</b>	<b>Waste, pork meat (production of sausage)</b>	H-(8)	+	H-	+	<i>L. innocua</i>	+	6	a
2023	1902	<b>Déchets de plats préparés, riz espagnol (industrie de plats préparés)</b>	<b>Waste, RTRH food with rice (RTRH food industry)</b>	H-	+	H-	+	<i>L. innocua</i>	+	6	a
2023	1903	<b>Déchets de plats préparés, sauce champignons (industrie de plats préparés)</b>	<b>Waste, RTRH food with mushrooms sauce (RTRH food industry)</b>	H-	+	H-	+	<i>L. welshimeri</i>	+	6	a
2023	1904	<b>Déchets de plats préparés, crêpes bretonnes (industrie de plats préparés)</b>	<b>Waste, RTRH food pancake (RTRH food industry)</b>	H-	+	H-	+	<i>L. welshimeri</i>	+	6	a
2023	2398	<b>Déchet produit carné (production de jambon saumuré)</b>	<b>Waste, meat product (production of ham)</b>	H-(1)	st	H-	-	<i>L. welshimeri</i>	+	6	a
2023	2399	<b>Déchet produit carné (production de chipolatas)</b>	<b>Waste, meat product (production of sausage)</b>	-	-	st	-	/	-	6	a
2023	2400	<b>Déchet produit carné 2 (production de jambon saumuré)</b>	<b>Waste, meat product (production of ham)</b>	H-	+	H-	+	<i>L. welshimeri</i>	+	6	a
2023	2401	<b>Déchet produit carné (production de chipolatas)</b>	<b>Waste, meat product (production of sausage)</b>	-	-	-	st	/	-	6	a
2023	2616	Poussière aspirateur (industrie de produits laitiers)	Vacuum dusts (dairy product industry)	-	-	-	-	/	-	6	a
2023	2617	Poussière aspirateur (industrie de produits laitiers)	Vacuum dusts (dairy product industry)	-	-	-	-	/	-	6	a
2023	2618	Poussière aspirateur (industrie de produits laitiers)	Vacuum dusts (dairy product industry)	st	-	st	-	/	-	6	a
2023	2619	Poussière aspirateur (industrie de produits laitiers)	Vacuum dusts (dairy product industry)	st	-	st	st	/	-	6	a
2023	2732	Déchets de crevettes (industrie de fruits de mer)	Waste, shrimps (seafood industry)	-	st	st	st	/	-	6	a
2023	837	Eau de process laveur automatique (industrie de produits de la mer)	Process water (Seafood industry)	H-	+	H-	+	<i>L. innocua</i>	+	6	b
2023	969	Eau dessalage rampe (industrie de produits de la mer)	Process water (Seafood industry)	st	st	st	st	/	-	6	b
2023	1028	Eau de process, égout (industrie d'herbes aromatiques)	Process water (aromatic herbs industry)	H+d/H+	-	H+	+	<i>L. mono</i>	+	6	b
2023	1327	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	H+	+	H+	+	<i>L. mono</i>	+	6	b
2023	1470	Eau de process, cuisine (industrie de produits de la mer)	Process water, kitchen (Seafood industry)	st	st	st	st	/	-	6	b
2023	1471	Eau de process, décongélation (industrie de produits de la mer)	Process water, thawing zone (Seafood industry)	st	st	st	st	/	-	6	b
2023	1472	Eau rinçage, étripage avant nettoyage (industrie produits de la mer)	Rinse water, before cleaning (Seafood industry)	st	st	st	st	/	-	6	b
2023	1473	Eau décongélation avant nettoyage (industrie produits de la mer)	Thawing water, before cleaning (Seafood industry)	st	st	st	st	/	-	6	b
2023	1474	Eau de process FRAGA (industrie produits de la mer)	Process water (Seafood industry)	-	-	-	-	/	-	6	b
2023	1475	Eau de rinçage, laveur (industrie produits de la mer)	Rinse water, washing machine (Seafood industry)	st	st	st	st	/	-	6	b
2023	1479	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	H+	+	H+	+	<i>L. mono</i>	+	6	b
2023	1480	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	-	st	st	st	/	-	6	b
2023	1485	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	-	-	st	st	/	-	6	b
2023	1486	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	H+	-	st	st	<i>L. mono</i>	+	6	b
2023	1487	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	-	st	st	st	/	-	6	b

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2023	1672	Eau de process, cuve de refroidissement (industrie de produits carnés)	Process water (meat products industry)	H+	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	6	b
<b>2023</b>	<b>2258</b>	<b>Eau de rinçage (production steak végétal + nuggets)</b>	<b>Rinse water (production of vegetable steak)</b>	H+(3)	+(1)	H+	+	<i>L. mono</i>	+	6	b
<b>2023</b>	<b>2260</b>	<b>Eau de rinçage (production porc saumuré jambon)</b>	<b>Rinse water (production of pork meat product)</b>	st	st	st	st	/	-	6	b
2023	2814	Eau de rinçage, épineuse (industrie de produits de la mer)	Rinse water, instrument (seafood industry)	st	st	st	st	/	-	6	b
2023	<b>2815</b>	<b>Eau de rinçage, mélangeur/batteur zone 1 (production sardines)</b>	<b>Rinse water, blender, zone 1 (production of sardines)</b>	H+	+	H+	+	<i>L. mono</i>	+	6	b
2023	2816	Eau de rinçage, mélangeur/batteur zone 2 (production sardines)	Rinse water, blender, zone 2 (production of sardines)	st	-	-	-	/	-	6	b
2023	970	Chiffonnette intérieur trancheur après nettoyage (industrie de produits de la mer)	Wipe, after cleaning (seafood industry)	st	st	st	st	/	-	6	c
2023	971	Chiffonnette tapis trancheur après nettoyage (industrie de produits de la mer)	Wipe, after cleaning (seafood industry)	st	st	st	st	/	-	6	c
2023	972	Chiffonnette tapis accélérateur avant nettoyage (industrie de produits de la mer)	Wipe, before cleaning (seafood industry)	st	st	st	-	/	-	6	c
2023	973	Chiffonnette trancheur food service avant nettoyage (industrie de produits de la mer)	Wipe, before cleaning (seafood industry)	st	-	st	-	/	-	6	c
2023	974	Chiffonnette trancheur slice avant nettoyage (industrie de produits de la mer)	Wipe, before cleaning (seafood industry)	st	-	st	-	/	-	6	c
2023	975	Chiffonnette rouleau trancheur slice avant nettoyage (industrie de produits de la mer)	Wipe, before cleaning (seafood industry)	st	-	-	-	/	-	6	c
2023	1468	Chiffonnette avant nettoyage, tapis étripage (industrie de produits de la mer)	Wipe before cleaning (seafood industry)	st	st	st	st	/	-	6	c
2023	1469	Chiffonnette avant nettoyage, tapis emboitage (industrie de produits de la mer)	Wipe before cleaning (seafood industry)	st	-	st	-	/	-	6	c
2023	1665	Chiffonnette avant nettoyage, seau blanc laverie 10 (industrie de produits de la mer)	Wipe before cleaning (seafood industry)	-	-	-	-	/	-	6	c
2023	1666	Chiffonnette avant nettoyage, seau blanc laverie 11 (industrie de produits de la mer)	Wipe before cleaning (seafood industry)	st	st	st	st	/	-	6	c
2023	1667	Chiffonnette avant nettoyage, seau blanc laverie 12 (industrie de produits de la mer)	Wipe before cleaning (seafood industry)	-	-	-	-	/	-	6	c
2023	<b>1886</b>	<b>Chiffonnette table de travail, après nettoyage (production steak végétal)</b>	<b>Wipe, working table, after cleaning (production of vegetable steak)</b>	H+	+	H+	+	<i>L. mono</i>	+	6	c
2023	<b>1887</b>	<b>Chiffonnette paillasse, après nettoyage (production steak végétal)</b>	<b>Wipe, working table, after cleaning (production of vegetable steak)</b>	H+	+	H+	+	<i>L. mono</i>	+	6	c
2023	<b>1888</b>	<b>Chiffonnette raclette, après nettoyage (industrie de plats préparés)</b>	<b>Wipe, after cleaning (RTRH food industry)</b>	st	st	st	st	/	-	6	c
2023	<b>1889</b>	<b>Chiffonnette bac gris, après nettoyage (industrie de plats préparés)</b>	<b>Wipe, after cleaning (RTRH food industry)</b>	H+	+	H+	+	<i>L. mono</i>	+	6	c
2023	<b>1890</b>	<b>Chiffonnette seau blanc, après nettoyage (industrie de plats préparés)</b>	<b>Wipe, after cleaning (RTRH food industry)</b>	H+	+	H+	+	<i>L. mono</i>	+	6	c
2023	<b>1891</b>	<b>Chiffonnette tapis étripage, après nettoyage (industrie de produits de la mer)</b>	<b>Wipe, after cleaning (RTRH food industry)</b>	H+	+	H+	+	<i>L. mono</i>	+	6	c
2023	<b>1892</b>	<b>Eponge tapis emboitage, après nettoyage (industrie de produits de la mer)</b>	<b>Sponge, after cleaning (seafood industry)</b>	H+	+	H+	+	<i>L. mono</i>	+	6	c
2023	<b>1893</b>	<b>Eponge plateau, après nettoyage (industrie de produits de la mer)</b>	<b>Sponge, after cleaning (seafood industry)</b>	H-ni/H-	+	H-	+	<i>L. welshimeri</i>	+	6	c
2023	<b>2402</b>	<b>Chiffonnette cutter avant nettoyage (production chipolatas)</b>	<b>Wipe, before cleaning, cutter (production of sausage)</b>	-	-	-	-	/	-	6	c

## PRODUCTION ENVIRONMENTAL SAMPLES

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 *						Category	Type
				Half Fraser		Fraser		Identification	Listeria spp final result		
				O&A	Palcam	O&A	Palcam				
2023	2403	Chiffonnette hall avant nettoyage (production chipolatas)	Wipe, before cleaning, hall (production of sausage)	H+/H-	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	6	c
2023	2404	Chiffonnette cutter avant nettoyage (production chipolatas)	Wipe, before cleaning, cutter (production of sausage)	H+	+	H+	+	<i>L. mono</i>	+	6	c
2023	2405	Chiffonnette table avant nettoyage (production chipolatas)	Wipe, before cleaning, working table (production of sausage)	-	-	-	-	/	-	6	c
2023	2813	Ecouvillon, épineuse (industrie de produits de la mer)	Swab, instrument (seafood industry)	st	st	st	st	/	-	6	c
2023	2817	Ecouvillon étaleur (production pâte fine)	Swab, instrument to spread (production of paste)	st	-	-	-	/	-	6	c
2023	2818	Ecouvillon plan de travail (production de mousse de foie de porc)	Swab, working table (production of pork pâté)	st	st	st	st	/	-	6	c
2023	2819	Ecouvillon mélangeur (production de mousse de foie de porc)	Swab, mixer (production of pork pâté)	H+	+	H+	+	<i>L. mono</i>	+	6	c

COMPOSITE FOODS / READY-TO-EAT AND READY-TO-REHEAT																										
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																			Category	Type	
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result									Confirmation							CFX96 Touch™ (standard)		AriaMx™			
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement				
Cq	result	Cq	result	O&A (10 µL)		Palcam (10 µL)	Identification			Reference tests																
2023	327	Pépites de fromage panées ail et fines herbes	RTE breaded cheese with garlic and aromatic herbs	-	No Cq	29,08	valid	-	No Cq	26,71	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	a		
2023	337	Houmous citron confit	Houmous with candied lemon	-	No Cq/ No Cq/ No Cq	30,22/ 29,09/ 28,95	valid/ valid/ valid	-/-/-	36,22/ No Cq/ No Cq	28,53/ 26,43/ 26,01	valid/ valid/ valid	+/-/-	-	-	/	/	-	-	-	NA	-	PPNA	1	a		
2023	1042	Ktipiti (feta, poivron grillé et feuilles de menthe)	Ktipiti (cheese, pepper and mint)	-	No Cq	30,31	valid	-	No Cq	28,44	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	a		
2023	1045	Guacamole	Guacamole	-	No Cq	30,51	valid	-	No Cq	28,49	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	a		
2023	1385	Piémontaise au jambon	Piémontaise with ham	+	25,85	30,25	valid	+	21,07	26,31	valid	+	H+	+	<i>L. mono</i>	/	/	+	+	PA	+	PA	1	a		
2023	1386	Piémontaise au jambon	Piémontaise with ham	+	26,25	30,80	valid	+	21,21	26,62	valid	+	H+	+	<i>L. mono</i>	/	/	+	+	PA	+	PA	1	a		
2023	1387	Piémontaise au jambon	Piémontaise with ham	+	26,99	30,09	valid	+	22,2	26,17	valid	+	H+	+	<i>L. mono</i>	/	/	+	+	PA	+	PA	1	a		
2023	1852	Houmous citron menthe	RTE hummus	-	No Cq	29,48	valid	-	No Cq	25,98	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	a		
2023	1873	Sandwich saumon salade pain de mie complet	Sandwich with salmon, salad, wholemeal bread	+	25,15	29,61	valid	+	20,46	25,1	valid	+	H+	+	<i>L. mono</i>	/	/	+	+	PA	+	PA	1	a		
2023	1874	Sandwich jambon beurre pain de mie complet	Sandwich with ham, butter, wholemeal bread	+	No Cq	29,44	valid	-	No Cq	25,29	valid	-	st	-	/	/	-	-	-	ND	-	ND	1	a		
2023	1875	Club sandwich poulet rôti mayonnaise avec farine complète	Sandwich with roasted chicken meat, mayonnaise, wholemeal bread	+	23,90	30,17	valid	+	19,41	25,04	valid	+	H-	+	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	1	a		
2023	1876	Club sandwich emmental crudités avec farine complète	Sandwich with cheese, vegetables, wholemeal bread	-	No Cq	29,40	valid	-	No Cq	25,41	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	a		
2023	1877	Mini farfalles au thon tomate ail et ciboulette	Pasta salad with tuna, tomatoes and garlic	-	37,01/ 35,91/ 37,31	29,41/ 29,85/ 29,45	valid/ valid/ valid	+/+/+	31,49/ 32,75/ 32,75	25,30/ 25,61/ 25,21	valid/ valid/ valid	+/+/+	-(x5)	-(x5)	/	/	H-d/- (-x5 after subculture, RLMx5:-)	-	-	PPNA	-	PPNA	1	a		
2023	1878	Salade fusillu et jambon cuit comté tomates cerises et vinaigre balsamique	Pasta salad with cooked ham, tomatoes	-	38,04/ 38,12/ 39,01	29,59/ 29,39/ 29,64	valid/ valid/ valid	+/+/+	34,45/ 34,62/ 33,84	25,57/ 25,60/ 25,19	valid/ valid/ valid	+/+/+	-(x5)	-(x5)	/	/	-(-x5 after subculture, RLMx5:-)	-	-	PPNA	-	PPNA	1	a		
2023	1879	Salade Manhattan, crudités œuf poulet rôti carottes et fromage	Salad with vegetables, eggs, chicken meat, carrot and cheese	-	No Cq	29,34	valid	-	No Cq	25,7	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	a		

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.



COMPOSITE FOODS / READY-TO-EAT AND READY-TO-REHEAT																										
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																			Category	Type	
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation								CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies				After purification step (from O&A or Palcam)				Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result			Agreement
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests											
	2023	2151			Apéritif olives, feta, tomates séchées, origan	Olives with cheese and tomatoes										+	30,81	28,92	valid	+	26,51	25,76	valid	+	H+	-
2023	2152	Mini roulé coppa, fromage de vache et ricotta	RTE ham with cheese	+	26,86	28,97	valid	+	22,65	25,89	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	a		
2023	2153	Petits poivrons farcis, fromage de vache et ricotta	RTE pepper with cheese	-	28,03	28,60	valid	+	23,74	25,52	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	1	a		
2023	2154	Salade jambon sec, chèvre et sauce vinaigrette	Salad with ham, cheese and sauce	+	31,42	28,78	valid	+	27,21	25,65	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	a		
2023	2155	Salade océane, thon, œuf, sauce cocktail	Salad with tuna, eggs and sauce	-	No Cq	28,66	valid	-	No Cq	25,57	valid	-	st	-	/	/	-	-	-	NA	-	NA	1	a		
2023	2156	Sandwich thon crudités avec pain de mie complet	Salad with tuna, vegetables, wholemeal bread	+	28,48	29,16	valid	+	24,44	26,13	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	a		
2023	2157	Sandwich poulet, crudités, baguette viennoise	Sandwich with chicken meat and vegetables	-	26,92	28,78	valid	+	22,75	26,33	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	1	a		
2023	2158	Wrap poulet rôti façon fajitas sauce salsa	Wrap sandwich with sauce	+	39,00	29,04	valid	+	35,23	26,08	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	a		
2023	2159	Wrap falafel tomates salade	Wrap sandwich with falafel, tomatoes and salad	-	No Cq	28,94	valid	-	No Cq	26,21	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	a		
2023	325	Paillason de légumes	RTRH food with vegetables	+	No Cq	29,00	valid	-	No Cq	26,65	valid	-	-	-	/	/	-	-	-	ND	-	ND	1	b		
2023	336	Galette de soja à la provençale	Soya galette with tomatoes and aromatic herbs	-	No Cq/ No Cq/ No Cq	32,73/ 29,06/ 29,03	valid/ valid/ valid	-/-	No Cq/ No Cq/ No Cq	28,81/ 29,13/ 29,65	valid/ valid/ valid	-/-	-	-	/	/	+	(H-: <i>L.innocua</i> )	+	-	NA	-	NA	1	b	
2023	578	Galette soja tomate basilic	Soya cake with tomato and basil	-	No Cq	29,87	valid	-	No Cq	26,19	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	b		
2023	580	Paillason légumes et fromage	RTRH food with vegetables and cheese	+	No Cq	29,88	valid	-	No Cq	28,43	valid	-	-	-	/	/	-	-	-	ND	-	ND	1	b		
2023	836	Paillason légumes et fromage	RTRH food with vegetables and cheese	-	No Cq	29,58	valid	-	No Cq	25,61	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	b		
2023	1035	Samoussa poulet	Chicken samoussa	+	34,50	30,40	valid	+	30,71	28,27	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	1	b		
2023	1342	Ecrasé portionnable thym seigle	RTRH food with potatoes, thyme, rye	+	No Cq	29,53	valid	-	No Cq	25,64	valid	-	st	-	/	/	-	-	-	ND	-	ND	1	b		
2023	1346	Epinard haché à la crème	Sliced spinach with cream	+	27,16	29,45	valid	+	22,8	25,33	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	b		
2023	1481	Palets de courgettes avec fromage	Zucchini cake with cheese	+	No Cq	29,32	valid	-	No Cq	25,78	valid	-	-	-	/	/	-	-	-	ND	-	ND	1	b		
2023	1674	Knack végétal fumée et cuite	Cooked and smoked vegetable sausage	-	No Cq	30,29	valid	-	No Cq	25,58	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	b		

COMPOSITE FOODS / READY-TO-EAT AND READY-TO-REHEAT																										
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					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation								CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies				After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result			Agreement
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
	Cq	result			Cq	result																				
2023	1675	Feuilleté au jambon et fromage	RTRH food with ham and cheese	-	No Cq/ 41,32/ No Cq	31,76/ 30,36/ 32,50	valid/ valid/ valid	-/+/-	No Cq/ No Cq/ No Cq	27,43/ 25,61/ 26,23	valid/ valid/ valid	-/-	H+(2)	-	<i>L. mono</i>	+	/	+	-	NA	-	NA	1	b		
2023	1854	Effeillé de pomme de terre, oignons rouges tomates séchées cuit surgelé	Cooked and frozen RTRH food with potatoes, onions, tomatoes	-	26,13	29,08	valid	+	21,33	25,25	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	1	b		
2023	1916	Pizza 4 fromages	Pizza, 4 cheeses	+	No Cq	29,85	valid	-	No Cq	25,75	valid	-	-	-	/	/	-	-	-	ND	-	ND	1	b		
2023	1917	Pizza jambon fromage	Pizza with ham and cheese	+	37,12	29,74	valid	+	31,66	25,86	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	b		
2023	1918	Quiche aux trois fromages (emmental, reblochon, chèvre)	Cheese pie	+	31,82	29,20	valid	+	27,67	25,16	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	1	b		
2023	1919	Couscous à la marocaine poulet et merguez	Couscous	+	No Cq	29,38	valid	-	No Cq	25,15	valid	-	st	st	/	/	-	-	-	ND	-	ND	1	b		
2023	1920	Couscous royal aux 3 viandes	Couscous with 3 meats	-	23,88	29,60	valid	+	19,91	25,04	valid	+	H+/H-	+	<i>L. mono/ L. innocua</i>	+	/	+	+	PD	+	PD	1	b		
2023	2623	Quiche lorraine aux lardons fumés et crème fraîche	Pie with smoked pork meat and cream	-	No Cq	28,54	valid	-	No Cq	26,4	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	b		
2023	2624	Tresse jambon emmental, pâte feuilletée pur beurre	RTRH food with puff paste ham and cheese	-	No Cq	30,82	valid	-	No Cq	26,35	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	b		
2023	2625	Pizza jambon/fromage	Pizza with ham and cheese	-	No Cq	29,02	valid	-	No Cq	26,34	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	b		
2023	2626	Roulé aux 3 fromages	RTRH with puff paste and 3 cheeses	-	No Cq	28,58	valid	-	No Cq	25,58	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	b		
2023	586	Croissant	Croissant	-	No Cq	32,21	valid	-	No Cq	27,84	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	c		
2023	939	Flan à la part	Pastry flan	+	29,92	29,03	valid	+	26,52	26,24	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	1	c		
2023	940	Flan pâtissier	Pastry flan	+	28,86	29,02	valid	+	25,39	26,25	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	1	c		
2023	941	Tortilla espagnole moelleuse à l'oignon	Omelette (with onions)	-	No Cq	29,04	valid	-	No Cq	26,34	valid	-	st	-	/	/	-	-	-	NA	-	NA	1	c		
2023	942	Tortilla espagnole aux pommes de terre	Omelette (with potatoes)	-	26,64	28,95	valid	+	23,47	26,58	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	1	c		
2023	943	Coupe bavaroise aux fraises	Pastry with strawberries	-	31,16	29,40	valid	+	27,38	26,98	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PD	+	PD	1	c		
2023	944	Paris Brest	Pastry with custard	+	27,35	29,34	valid	+	24,33	26,83	valid	+	H-	-	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	1	c		
2023	945	Eclair vanille	Pastry with custard (vanilla)	+	27,20	29,05	valid	+	23,72	26,56	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	1	c		
2023	1043	Suisse chocolat 21%	Pastry with chocolate (21%)	-	No Cq	33,24	valid	-	No Cq	30,09	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	c		
2023	1853	Pain aux raisins	Raisin bread	+	40,97	30,79	valid	+	35,27	27,33	valid	+	H+d(3)/ H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	c		
2023	1880	Flan pâtissier	Pastry flan	+	24,18	30,25	valid	+	19,61	24,94	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	c		

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					CFX96 Touch™ (standard)					AriaMx™					Typical colonies				After purification step (from O&A or Palcam)			Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result			Agreement	Final result	Agreement
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests									
2023	1881	Choux chantilly	Pastry with Chantilly	+		24,15	31,50			valid	+										19,72	26,05	valid	+	H+	+	<i>L. mono</i>	+	/
2023	1882	Choux à la crème	Pastry with cream	-	32,89	29,40	valid	+	27,45	25,43	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	1	c					
2023	1883	Tarte Tropézienne	Pastry with cream	+	26,06	29,77	valid	+	20,3	24,96	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	c					
2023	1884	Tortilla espagnole avec pommes de terre	Omelette with potatoes	-	30,43/ 29,82/ 30,95	29,31/ 29,58/ 29,48	valid/ valid/ valid	+/+	26,27/ 26,96/ 26,95	25,57/ 25,74/ 25,92	valid/ valid/ valid	+/+	-(x5)	-(x5)	/	/	-(-x5 after subculture)	-	-	PPNA	-	PPNA	1	c					
2023	1885	Tortilla fraiche aux oignons	Omelette with onions	-	No Cq	29,23	valid	-	No Cq	25,64	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	c					
2023	2250	Flan aux œufs cuit et doré au four	Pastry flan	+	32,15	29,20	valid	+	27,60	25,76	valid	+	H+ni/ H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	c					
2023	2251	Eclair café	Pastry, with cream flavour coffee	+	No Cq	29,33	valid	-	No Cq	25,70	valid	-	-	-	/	/	-	-	-	ND	-	ND	1	c					
2023	2252	Fraisier	Pastry with cream and strawberry	+	33,08	29,37	valid	+	28,31	26,00	valid	+	H+ni/ H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	c					
2023	2253	Choux chantilly	Pastry with Chantilly	+	32,27	29,49	valid	+	27,78	26,51	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	1	c					
2023	2627	Barre chocolatée avec biscuit caramel	Confectionary with chocolate and caramel	-	No Cq/ 40,46*/ No Cq**	41,78/ 27,74*/ 27,64**	Invalid/ valid*/ valid**	Q/+* - **	No Cq/ No Cq*/ No Cq**	No Cq/ 25,35*/ 25,35**	Invalid/ valid*/ valid**	Q/-* - **	-	-	/	/	-	-	-	PPNA	-	NA	1	c					
2023	2628	Barre chocolatée avec caramel	Confectionary with caramel	-	No Cq	35,53	valid	-	No Cq	33,74	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	c					
2023	2629	Religieuse chocolat	Pastry with chocolate	-	No Cq	32,30	valid	-	No Cq	29,85	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	c					
2023	2630	Fraisier	Pastry with cream and strawberry	-	No Cq	28,77	valid	-	No Cq	26,17	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	c					
2023	2631	Flan cuit et doré au four	Pastry flan	-	No Cq	29,04	valid	-	No Cq	26,41	valid	-	-	-	/	/	-	-	-	NA	-	NA	1	c					

## MEAT PRODUCTS

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																			Category	Type	
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation								CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement				
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
	Cq	result			Cq	result																				
2023	276	Viande de poulet crue	Raw chicken meat	+	23,96	No Cq	Invalid	+	18,03	27,56	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	2	a		
2023	277	Steak haché de volaille	Raw ground poultry	+	30,65	29,56	valid	+	26,03	27,58	valid	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	/	+	+	PA	+	PA	2	a		
2023	280	Cuisse de poulet	Chicken leg meat	+	28,78	29,21	valid	+	24,58	26,93	valid	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	/	+	+	PA	+	PA	2	a		
2023	282	Viande rouge avec peau	Raw red meat	+	No Cq	29,08	valid	-	No Cq	27,11	valid	-	st	st	/	/	-	-	-	ND	-	ND	2	a		
2023	285	Cuisse de coq	Raw rooster meat	-	No Cq/ No Cq/ No Cq	28,49/ 29,64/ 29,50	valid/ valid/ valid	-/-	No Cq/ No Cq/ No Cq	26,35/ 26,57/ 27,66	valid/ valid/ valid	-/-	-	-(2)	/	/	+ (H+: <i>L. mono</i> )	+	-	NA	-	NA	2	a		
2023	286	Steak haché de volaille	Raw ground poultry	+	23,58	29,37	valid	+	19,33	26,2	valid	+	H- (x5: H+/H-)	+	<i>L. mono</i> <i>L. welshimeri</i>	+	/	+	+	PA	+	PA	2	a		
2023	288	Steak haché de volaille	Raw ground poultry	+	28,26	29,68	valid	+	23,78	27,56	valid	+	H-	+	<i>L. welshimeri</i>	+	+(H+: <i>L. mono</i> )	+	+	PA	+	PA	2	a		
2023	295	Viande crue de dinde	Raw poultry meat	+	No Cq/ No Cq/ No Cq	32,39/ 30,25/ 30,46	valid/ valid/ valid	-/-	37,01/ 33,75/ 35,87	30,04/ 31,20/ 29,86	valid/ valid/ valid	+/+	+d/H-	-	<i>L. innocua</i>	+	+(H-)	+	-	ND	+	PA	2	a		
2023	328	Steak de poulet	Chicken meat	-	No Cq	29,19	valid	-	No Cq	26,81	valid	-	-	-	/	/	-	-	-	NA	-	NA	2	a		
2023	331	Cuisse de dinde	Poultry leg meat	+	30,76	33,05	valid	+	26,44	30,5	valid	+	H-	+	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	2	a		
2023	332	Steak haché de volaille	Raw ground poultry meat	+	32,28	31,47	valid	+	27,4	29,37	valid	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	/	+	+	PA	+	PA	2	a		
2023	431	Steak haché de bœuf	Raw ground beef meat	+	35,37	31,87	valid	+	30,67	27,54	valid	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	/	+	+	PA	+	PA	2	a		
2023	434	Steak haché de volaille	Raw ground poultry meat	-	33,92	31,20	valid	+	29,56	27,13	valid	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	/	+	+	PD	+	PD	2	a		
2023	582	Haut de cuisse de dinde	Raw poultry meat	+	32,08	33,49	valid	+	27,25	29,95	valid	+	H-	+	<i>L. innocua</i>	+	+	+	+	PA	+	PA	2	a		
2023	583	Sauté de dinde	Raw poultry meat	+	33,56	33,40	valid	+	28,32	29,37	valid	+	H-	+	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	2	a		
2023	834	Poulet au citron cru	Raw chicken meat	-	35,91	30,59	valid	+	30,57	26,82	valid	+	H-	-	<i>L. welshimeri</i>	+	+(H-)	+	+	PD	+	PD	2	a		
2023	2262	Viande bovine rumsteak à griller surgelée	Raw beef meat	+	31,53	30,33	valid	+	25,77	25,91	valid	+	H-	+	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	2	a		
2023	2263	Viande d'agneau, gigo à griller, surgelée	Raw lamb meat	-	No Cq	29,67	valid	-	No Cq	25,85	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	a		
2023	2264	Viande de veau escalope à griller surgelée	Raw veal meat	-	No Cq	29,81	valid	-	No Cq	25,90	valid	-	st	-	/	/	-	-	-	NA	-	NA	2	a		
2023	2265	Aiguillettes de poulet surgelées	Frozen raw chicken meat	-	No Cq	30,00	valid	-	No Cq	26,99	valid	-	-	st	/	/	-	-	-	NA	-	NA	2	a		
2023	2266	Viande bovine, charolais	Raw beef meat	-	No Cq	29,34	valid	-	No Cq	26,38	valid	-	-	-	/	/	-	-	-	NA	-	NA	2	a		

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.



## MEAT PRODUCTS

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																		Category	Type		
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result						Confirmation										CFX96 Touch™ (standard)				AriaMx™	
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement				
Cq	result	Cq	result	O&A (10 µL)		Palcam (10 µL)	Identification			Reference tests																
2023	2267	Filet de canard façon tournedos	Raw duck meat	+	37,71	30,01	valid	+	32,37	26,61	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	2	a		
2023	2268	Escalope de veau à griller	Raw veal meat	-	No Cq	29,26	valid	-	No Cq	25,79	valid	-	-	-	/	/	-	-	-	NA	-	NA	2	a		
2023	2269	Filet de dinde	Raw poultry meat	-	31,87	32,05	valid	+	26,95	28,46	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	2	a		
2023	2725	Gigot d'agneau, tranche à griller	Raw lamb meat	-	No Cq	29,53	valid	-	No Cq	25,57	valid	-	-	-	/	/	-	-	-	NA	-	NA	2	a		
2023	2726	Viande bovine, steak à griller	Raw beef meat	-	No Cq	29,23	valid	-	No Cq	25,57	valid	-	-	-	/	/	-	-	-	NA	-	NA	2	a		
2023	2727	Escalope de veau à griller	Raw veal meat	-	30,96	29,73	valid	+	26,12	25,32	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	2	a		
2023	275	Cubes de filet de poulet mariné forestier rôti	Seasoned roasted chicken meat	-	No Cq	28,11	valid	-	No Cq	25,51	valid	-	-	-	/	/	-	-	-	NA	-	NA	2	b		
2023	278	Ailes de poulet rôti	Roasted chicken wings	+	No Cq	28,01	valid	-	No Cq	25,47	valid	-	-	-	/	/	-	-	-	ND	-	ND	2	b		
2023	284	Porc au curry	Cooked pork meat with curry	+	25,67	27,85	valid	+	21,36	25,46	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	2	b		
2023	291	Poulet façon fajitas	Cooked chicken meat (fajitas)	-	36,86	28,31	valid	+	32,36/ 32,66/ 31,57	25,53/ 26,07/ 25,89	valid/ valid/ valid	+/+	+d/H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	2	b		
2023	294	Porc au curry	Cooked pork meat with curry	+	20,58	34,34	valid	+	16,18	28,63	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	2	b		
2023	326	Escalope poulet pané	Breaded chicken cutlet	+	30,41	29,12	valid	+	26,03	26,53	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	2	b		
2023	432	Emincés de poulet mariné au citron (cuit)	Seasoned chicken meat (with lemon)	-	No Cq	29,69	valid	-	No Cq	25,25	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	b		
2023	433	Ailes de poulet pimentées	Seasoned chicken wings	-	No Cq	29,57	valid	-	No Cq	25,23	valid	-	-	-	/	/	-	-	-	NA	-	NA	2	b		
2023	1029	Nuggets de dinde cuit	Poultry nuggets	-	No Cq	29,99	valid	-	No Cq	27,57	valid	-	st	-	/	/	-	-	-	NA	-	NA	2	b		
2023	1041	Poitrine de porc fumée	Smoked pork meat	-	No Cq	29,87	valid	-	No Cq	28,14	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	b		
2023	1905	Bœuf bourguignon	Cooked beef meat	-	31,39	29,40	valid	+	27,27	25,89	valid	+	H+	+	<i>L. ivanovii</i>	+	+ (H+ <i>L. ivanovii</i> )	+	+	PD	+	PD	2	b		
2023	1906	Blanquette de veau	Cooked veal meat	-	21,32	32,96	valid	+	17,48	26,79	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	2	b		
2023	1907	Lapin chasseur	Cooked rabbit meat	+	No Cq	29,41	valid	-	No Cq	25,36	valid	-	st	st	/	/	-	-	-	ND	-	ND	2	b		
2023	1908	Poulet basquaise au piment du Pays Basque	Cooked chicken meat	+	No Cq	29,42	valid	-	No Cq	25,31	valid	-	st	st	/	/	-	-	-	ND	-	ND	2	b		
2023	1909	Roti de porc, RTRH	Cooked pork meat	+	22,22	31,26	valid	+	17,92	25,35	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	2	b		
2023	2270	Saucisse de Toulouse aux lentilles vertes	RTRH food with pork meat	-	No Cq	29,37	valid	-	No Cq	26,67	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	b		
2023	2271	Poulet basquaise	RTRH food with chicken meat	-	No Cq	29,14	valid	-	No Cq	25,67	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	b		
2023	2272	Bœuf bourguignon	RTRH food with beef meat	-	No Cq	29,42	valid	-	No Cq	25,85	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	b		

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					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result									Confirmation							CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™					Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement			
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
	Cq	result			Cq	result																				
2023	2274	Sauté de veau et ses petits légumes au jus de citron	RTRH food with veal meat	-	No Cq	29,09	valid	-	No Cq	25,94	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	b		
2023	2633	Veau marengo	RTRH food with veal meat	-	No Cq	28,84	valid	-	No Cq	26,01	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	b		
2023	2820	Bœuf sauce au poivre	RTRH beef meat with pepper	-	38,81 / No Cq / 32,09	28,63/28,09/28,04	valid/valid/valid	+/-/+	No Cq	25	valid	-	H-d	-	-	-	-	-	-	PPNA	-	NA	2	b		
2023	279	Saucisse de Strasbourg (sel réduit)	Sausage (Strasbourg)	-	No Cq	28,20	valid	-	No Cq	25,86	valid	-	-	-	/	/	-	-	-	NA	-	NA	2	c		
2023	281	Jambon de Vendée à l'ancienne	Cooked ham	-	No Cq	28,14	valid	-	No Cq	26,26	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	c		
2023	283	Saucisse de ferme crue	Raw sausage	-	No Cq	27,94	valid	-	No Cq	26,08	valid	-	-	st	/	/	-	-	-	NA	-	NA	2	c		
2023	287	Boudin noir	Blood sausage	+	20,72	33,62	valid	+	16,64	28,6	valid	+	H+/H-d(1)	+	<i>L. mono/ L. welshimeri</i>	+	/	+	+	PA	+	PA	2	c		
2023	289	Pâté à l'ail	Pâté with garlic	-	No Cq	28,67	valid	-	No Cq	26,33	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	c		
2023	290	Saucisson aux cèpes	Sausage with mushrooms	-	40,34/ No Cq/ No Cq	28,28/ 29,58/ 29,48	valid/valid/valid	+/-/-	39,35/ (41,12)/ (37,31)	26,43/ 27,35/ 26,52	valid/valid/valid	-/-/-	- (x5)	- (x5)	/	/	-(-x5 after subculture)	-	-	PPNA	-	NA	2	c		
2023	292	Saucisse knacki	Knack sausage	-	40,07	27,71	valid	+	35,2/ 34,11/ 33,60	25,85/ 26,59/ 26,25	valid/valid/valid	+/+/+	-	-	<i>L. welshimeri</i> (72h)	+ (72h)	+ (H-)	+	+	PD	+	PD	2	c		
2023	293	Saucisse de poulet	Chicken sausage	-	No Cq	27,97	valid	-	No Cq	25,73	valid	-	st	-	/	/	-	-	-	NA	-	NA	2	c		
2023	296	Saucisse au muscadet	Sausage with muscadet	-	No Cq	28,15	valid	-	No Cq	25,96	valid	-	-	-	/	/	-	-	-	NA	-	NA	2	c		
2023	329	Saucisse de poulet fromage	Chicken sausage with cheese	-	No Cq	29,39	valid	-	No Cq	27,25	valid	-	st	-	/	/	-	-	-	NA	-	NA	2	c		
2023	333	Lardons fumés cuits	Cooked smoked bacon	-	No Cq	28,96	valid	-	No Cq	26,72	valid	-	st	st	/	/	-	-	-	NA	-	NA	2	c		
2023	584	Chorizo fumé	Smoked chorizo	+	28,97	29,81	valid	+	24,31	26,98	valid	+	H+/H-	+	<i>L. mono / L.welshimeri</i>	+	/	+	+	PA	+	PA	2	c		
2023	835	Saucisse de Strasbourg	Sausage (Strasbourg)	-	No Cq	29,40	valid	-	No Cq	25,41	valid	-	-	-	/	/	-	-	-	NA	-	NA	2	c		
2023	1034	Saucisse Ouessant fumée à la motte	Smoked sausage	+	34,62	30,27	valid	+	30,48	28,55	valid	+	H+/H-	+	<i>L. mono / L. innocua</i>	+	/	+	+	PA	+	PA	2	c		
2023	1048	Jambon cuit supérieur en dès	Cooked and sliced ham	+	32,66	29,69	valid	+	28,69	27,29	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	2	c		
2023	1189	Merguez	Merguez	+	25,70	30,26	valid	+	21,1	26,13	valid	+	H+dni (+RLM)/H-	+	<i>L. mono (RLM)/ L. innocua</i>	+	/	+	+	PA	+	PA	2	c		
2023	1191	Chorizo fumé pur porc	Smoked chorizo	+	No Cq	30,02	valid	-	No Cq	26,61	valid	-	-	-	/	/	-	-	-	ND	-	ND	2	c		
2023	1478	Pâté de campagne maison	Farmer's pâté	+	23,94	30,10	valid	+	19,8	25,92	valid	+	H+/H-	+	<i>L. mono / L. innocua</i>	+	/	+	+	PA	+	PA	2	c		
2023	1484	Saucisse de Strasbourg supérieure	Sausage (Strasbourg)	+	28,79	29,14	valid	+	24,66	25,64	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	2	c		

## MEAT PRODUCTS

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				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																				
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation							CFX96 Touch™ (standard)				AriaMx™	
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result			Agreement	
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests														
2023	1657	Merguez piquante		Spicy merguez	+	36,64		30,35	valid	+	31,29	26,14	valid	+	H-dni/H+	-	<i>L. mono</i> / <i>L. innocua</i> (72h)	+	+(H+/H-( <i>L. innocua</i> ))	+	+	PA	+	PA	2
2023	1658	Chorizo fumé	Smoked chorizo	-	30,67	29,92	valid	+	25,57	25,68	valid	+	H-ni/H-	+	<i>L. welshimeri</i>	+	+(H-)	+	+	PD	+	PD	2	c	
2023	1659	Merguez tunisienne	Tunisian merguez	+	33,87	30,20	valid	+	28,5	25,52	valid	+	H-ni/H-	-	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	2	c	
2023	1660	Saucisse d'agneau	Lamb sausage	-	39,11	30,40	valid	+	33,03	26,07	valid	+	H+dni/H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	2	c	
2023	1673	Chorizo fumé pur porc	Smoked chorizo	+	28,43	30,10	valid	+	23,51	25,81	valid	+	H+/H-	+	<i>L. mono</i> / <i>L. innocua</i>	+	/	+	+	PA	+	PA	2	c	
2023	1676	Merguez	Merguez	+	32,06	29,67	valid	+	27,8	25,82	valid	+	H+/H-d	-	<i>L. mono</i> / <i>L. innocua</i>	+	/	+	+	PA	+	PA	2	c	



MILK AND DAIRY PRODUCTS																										
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																			Category	Type	
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation								CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies				After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result			Agreement
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
2023	429	Fromage pâte persillée au lait cru de brebis		Raw ewe milk cheese	-	No Cq		31,37	valid	-	34,84/ No Cq/ No Cq	26,87/ 28,67/ 28,73	valid/ valid/ valid	+/-	st	-	/	/	-	-	NA	-	PPNA	3	a	
2023	435	Fromage pâte persillée au lait cru de brebis	Raw ewe milk cheese	-	41,36/ No Cq/ No Cq	30,52/ 29,96/ 30,53	valid/ valid/ valid	+/-	No Cq	26,15	valid	-	st	st	/	/	-	-	PPNA	-	NA	3	a			
2023	436	Fromage pâte persillée au lait cru de brebis	Raw ewe milk cheese	-	41,32/ 41,81/ No Cq	29,71/ 29,84/ 29,91	valid/ valid/ valid	+/+	35,79/ No Cq/ 34,80	25,60/ 27,86/ 27,83	valid/ valid/ valid	+/-	st (x5)	-(x5)	/	/	-(-x5 after subculture)	-	PPNA	-	PPNA	3	a			
2023	838	Camembert au lait cru	Raw cow milk cheese	+	39,17	30,13	valid	+	34,65	27,19	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	3	a		
2023	839	Camembert au lait cru	Raw cow milk cheese	-	38,76	29,87	valid	+	35,91	26,51	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PD	+	PD	3	a		
2023	841	Brie de Meaux au lait cru	Raw cow milk cheese	-	No Cq	32,39	valid	-	No Cq	28,67	valid	-	-	-	/	/	-	-	NA	-	NA	3	a			
2023	842	Maroilles fermier au lait cru de vache	Raw cow milk cheese	-	No Cq	31,87	valid	-	No Cq	28,78	valid	-	-	-	/	/	-	-	NA	-	NA	3	a			
2023	843	Munster au lait cru de vache	Raw cow milk cheese	-	33,53	30,53	valid	+	29,56	27,55	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PD	+	PD	3	a		
2023	844	Saint Paulin au lait cru	Raw cow milk cheese	-	No Cq	32,16	valid	-	No Cq	29,04	valid	-	-	-	/	/	-	-	NA	-	NA	3	a			
2023	846	Cœur Neufchâtel fermier au lait cru de vache	Raw cow milk cheese	-	No Cq	29,77	valid	-	No Cq	26,36	valid	-	-	-	/	/	-	-	NA	-	NA	3	a			
2023	847	Brie de Meaux au lait cru	Raw cow milk cheese	-	No Cq	31,41	valid	-	No Cq	27,64	valid	-	-	-	/	/	-	-	NA	-	NA	3	a			
2023	848	Tomme de brebis au lait cru	Raw ewe milk cheese	-	No Cq	29,19	valid	-	No Cq	25,35	valid	-	-	-	/	/	-	-	NA	-	NA	3	a			
2023	849	Crottin frais au lait cru	Raw goat milk cheese	-	No Cq	29,76	valid	-	No Cq	25,55	valid	-	-	-	/	/	-	-	NA	-	NA	3	a			
2023	850	Fondant de brebis au lait cru	Raw ewe milk cheese	+	31,90	29,17	valid	+	27,68	25,31	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	3	a		
2023	851	Reblochon au lait cru	Raw cow milk cheese	-	No Cq	32,61	valid	-	No Cq	28,65	valid	-	-	-	/	/	-	-	NA	-	NA	3	a			
2023	2160	Fromage au lait cru de Brebis Ossau iraty	Raw ewe milk cheese	+	27,08	28,56	valid	+	22,73	25,45	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	a		
2023	2161	Roquefort au lait cru de chèvre	Raw goat milk cheese	+	No Cq	29,03	valid	-	No Cq	26,13	valid	-	-	-	/	/	-	-	ND	-	ND	3	a			
2023	2162	Morbier au lait cru de vache	Raw cow milk cheese	+	33,53	32,56	valid	+	29,61	29,02	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	a		
2023	2163	Bethmale au lait cru de vache	Raw cow milk cheese	+	No Cq	32,41	valid	-	No Cq	29,65	valid	-	-	-	/	/	-	-	ND	-	ND	3	a			
2023	2164	Rocamadour au lait cru de chèvre	Raw goat milk cheese	+	31,14	28,99	valid	+	27,57	26,77	valid	+	H-ni/H-	-	<i>L. seeligeri</i>	+	+(H-)	+	+	PA	+	PA	3	a		
2023	2165	Chavignol au lait cru de chèvre	Raw goat milk cheese	+	29,56	29,00	valid	+	25,5	26,56	valid	+	H+/H-	+	<i>L. mono/ L. seeligeri</i>	+	/	+	+	PA	+	PA	3	a		

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.

MILK AND DAIRY PRODUCTS																											
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																				Category	Type	
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																						
					BACGene <i>Listeria</i> spp. - PCR result										Confirmation							CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies				After purification step (from O&A or Palcam)			Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result			Agreement
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests											
Cq	result	Cq	result																								
2023	2388	Brie de Meaux au lait cru	Raw cow milk cheese	+	28,40	33,69	valid	+	23,74	29,92	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	a			
2023	2389	Tomme de chèvre au lait cru	Raw goat milk cheese	+	27,62	29,02	valid	+	23,25	27,63	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	a			
2023	2390	Tomme de brebis au lait cru	Raw ewe milk cheese	+	No Cq	29,01	valid	-	No Cq	27,69	valid	-	st	-	/	/	-	-	-	ND	-	ND	3	a			
2023	2391	Emmental grand cru au lait cru de vache	Raw cow milk cheese	+	33,24	31,27	valid	+	29,46	30,01	valid	+	H+(3)	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	a			
2023	2611	Emmental au lait cru	Raw milk cheese	-	29,27	30,91	valid	+	25,56	28,16	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	3	a			
2023	444	Lait cru de brebis	Raw ewe milk	+	25,22	29,58	valid	+	20,97	24,95	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	b			
2023	1855	Lait de brebis	Ewe milk	+	21,09	32,29	valid	+	16,74	26,7	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	b			
2023	1856	Lait de brebis	Ewe milk	+	28,57	29,04	valid	+	24,46	26,15	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	b			
2023	1857	Lait de brebis	Ewe milk	+	25,29	29,91	valid	+	20,94	26,65	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	b			
2023	1864	Lait cru de vache	Raw cow milk	-	No Cq	29,14	valid	-	No Cq	26,76	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	b			
2023	1865	Lait cru entier de vache jersiaise	Raw cow milk	-	No Cq	32,51	valid	-	No Cq	29,46	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	b			
2023	1866	Faisselle au lait cru de vache	Raw cow milk	-	No Cq	29,13	valid	-	No Cq	25,23	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	b			
2023	1867	Crème crue fermière au lait cru de vache	Cream with raw cow milk	-	No Cq	32,28	valid	-	No Cq	28,96	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	b			
2023	2166	Lait cru fermenté de vache	Raw milk cheese	+	No Cq	29,24	valid	-	No Cq	26,29	valid	-	-	-	/	/	-	-	-	ND	-	ND	3	b			
2023	2167	Lait cru de vache jersiaise	Raw milk cheese	-	No Cq/ No Cq/ No Cq	29,18/ 29,68/ 29,80	valid/ valid/ valid	-/-	No Cq/ No Cq/ No Cq	26,24/ 25,28/ 24,98	valid/ valid/ valid	-/-	H+ni/H+	-	<i>L. ivanovii</i>	+	+(H+: <i>L. ivanovii</i> )	+	-	NA	-	NA	3	b			
2023	2168	Fromage blanc au lait cru de vache	White cheese with raw cow milk	-	No Cq	30,84	valid	-	No Cq	27,44	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	b			
2023	2169	Fromage blanc au lait cru de vache	White cheese with raw cow milk	-	No Cq	30,32	valid	-	No Cq	27,11	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	b			
2023	2170	Crème crue fermière au lait cru de vache	Cream with raw cow milk	+	No Cq/ No Cq/ No Cq	29,50/ 30,48/ 30,03	valid/ valid/ valid	-/-	No Cq/ No Cq/ No Cq	26,22/ 27,00/ 26,42	valid/ valid/ valid	-/-	H-d(1)	-	<i>L. ivanovii</i>	+	+(H+: <i>L. ivanovii</i> )	+	-	ND	-	ND	3	b			
2023	2171	Crème crue fermière au lait cru de vache	Cream with raw cow milk	+	No Cq/ No Cq/ No Cq	28,92/ 29,72/ 30,01	valid/ valid/ valid	-/-	No Cq/ No Cq/ No Cq	25,94/ 25,66/ 25,60	valid/ valid/ valid	-/-	-	-	/	/	+(H+: <i>L. mono</i> )	+	-	ND	-	ND	3	b			
2023	2392	Beurre cru de vache, baratte, demi-sel	Raw butter with salt	+	30,56	29,12	valid	+	26,62	28,04	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	b			
2023	2393	Beurre de baratte au lait cru demi-sel	Butter with raw milk and salt	-	29,93	No Cq	Invalid	+	26,06	No Cq	Invalid	+	H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	3	b			
2023	2394	Faisselle au lait cru de vache	Cottage cheese with raw cow milk	-	No Cq	29,78	valid	-	No Cq	29,17	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	b			
2023	2395	Fromage blanc fermier au lait cru entier de vache	White cheese with raw cow milk	-	No Cq	32,73	valid	-	No Cq	31,2	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	b			
2023	2396	Crème crue	Raw cream	-	No Cq	32,05	valid	-	No Cq	29,17	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	b			

MILK AND DAIRY PRODUCTS																												
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					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																							
					BACGene <i>Listeria</i> spp. - PCR result												Confirmation						CFX96 Touch™ (standard)				AriaMx™	
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement						
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests																	
	Cq	result			Cq	result																						
2023	2397	Crème crue au lait cru de vache	Raw cream with raw cow milk	-	No Cq/ No Cq/ No Cq	30,00/ 30,04/ 30,22	valid/ valid/ valid	-/-	No Cq/ 35,39/ 25,47	28,19/ 25,53/ 25,58	valid/ valid/ valid	-/+	H+(7)	-	<i>L. mono</i>	+	/	+	-	NA	-	NA	3	b				
2023	2610	Beurre doux à la crème maturé non pasteurisé	Butter with raw milk	+	28,06	31,24	valid	+	23,8	27,85	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	b				
2023	845	Brillat savarin au lait pasteurisé	Pasteurized cow milk cheese	-	No Cq	29,64	valid	-	No Cq	26,41	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	c				
2023	932	Petit basque au lait de brebis pasteurisé (36%MG)	Pasteurized ewe milk cheese (36% FL)	-	29,13	28,81	valid	+	25,62	26,29	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	3	c				
2023	933	Tomme des Pyrénées au lait de vache pasteurisé (28%MG)	Pasteurized cow milk cheese (28% FL)	+	31,12	29,12	valid	+	27,58	26,22	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	c				
2023	934	Bûche de chèvre au lait pasteurisé (23% MG)	Pasteurized goat milk cheese (23% FL)	-	34,35	28,90	valid	+	30,96	26,34	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PD	+	PD	3	c				
2023	935	Riz au lait saveur vanille	Rice pudding (vanilla)	+	28,36	29,12	valid	+	25,58	26,99	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	c				
2023	936	Semoule au lait saveur vanille	Milk semolina (vanilla)	+	26,18	29,15	valid	+	23,32	27,06	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	3	c				
2023	937	Crème fraîche légère épaisse pasteurisée	Pasteurized fresh cream (light)	+	No Cq	29,20	valid	-	No Cq	26,75	valid	-	st	-	/	/	-	-	-	ND	-	ND	3	c				
2023	938	Crème fraîche entière gastronomique pasteurisée	Pasteurized fresh cream (whole)	+	26,50	29,01	valid	+	24,26	26,76	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	3	c				
2023	1910	Crème fraîche épaisse légère pasteurisée	Pasteurised cream, thick and light	+	24,59	30,13	valid	+	19,94	24,44	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	c				
2023	1911	Crème fraîche épaisse pasteurisée	Pasteurised cream, thick	+	No Cq	29,39	valid	-	No Cq	24,91	valid	-	-	-	/	/	-	-	-	ND	-	ND	3	c				
2023	1912	Riz au lait vanille	Rice pudding (vanilla)	-	23,69	30,54	valid	+	19,87	25,07	valid	+	H-ni/H-	+	<i>L. seeligeri</i>	+	+(H-)	+	+	PD	+	PD	3	c				
2023	1913	Panna cotta et son coulis mangue passion	Panna cotta with fruit sauce	+	26,19	30,10	valid	+	22,14	25,64	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	c				
2023	1914	Panna cotta et son coulis caramel au lait	Panna cotta with caramel	+	No Cq	31,54	valid	-	No Cq	29,18	valid	-	-	-	/	/	-	-	-	ND	-	ND	3	c				
2023	1915	Lait demi écrémé frais pasteurisé	Pasteurised fresh milk, semi-skimmed milk	+	26,41	29,29	valid	+	22,12	25,19	valid	+	H+/H-	+	<i>L. mono</i> / <i>L. seeligeri</i>	+	/	+	+	PA	+	PA	3	c				
2023	2254	Semoule au lait et à la vanille	Semolina with milk and vanilla	+	32,46	29,28	valid	+	28,27	25,90	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	c				
2023	2255	Mozzarella mini	Pasteurised cheese, mozzarella	+	28,58	28,97	valid	+	24,42	25,83	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	c				

MILK AND DAIRY PRODUCTS																										
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																			Category	Type	
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation								CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies				After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result			Agreement
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
2023	2256	Mozzarella		Pasteurised cheese, mozzarella	+	29,09		29,17	valid	+	24,70	25,75	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	c
2023	2257	Ricotta	Pasteurised cheese, ricotta	+	37,61	29,44	valid	+	32,69	25,67	valid	+	H+ni/H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	3	c		
2023	2632	Cheesecake	Cheesecake	-	No Cq	28,72	valid	-	No Cq	26,23	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	c		
2023	2634	Riz au lait saveur vanille	Rice pudding (vanilla)	-	No Cq	29,07	valid	-	No Cq	26,19	valid	-	st	-	/	/	-	-	-	NA	-	NA	3	c		
2023	2635	Fromage penail au lait de brebis pasteurisé	Pasteurised cheese with ewe milk	-	No Cq	28,66	valid	-	No Cq	25,65	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	c		
2023	2636	Camembert au lait de vache pasteurisé	Pasteurised cheese with cow milk	-	No Cq	28,63	valid	-	No Cq	25,92	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	c		
2023	2637	Glace cookie dough	Ice cream, flavour cookie	-	No Cq/ No Cq/ No Cq	29,02/ 28,34/ 28,30	valid/ valid/ valid	-/-/-	36,46/ No Cq/ 35,92	26,65/ 29,92/ 25,99	valid/ valid/ valid	+/-/-	-	-	/	/	-	-	-	NA	-	PPNA	3	c		
2023	2638	Glace chocolat brownies	Ice cream, flavour chocolate brownie	-	No Cq/ No Cq*/ No Cq**	No Cq/ 28,47*/ 28,70**	Invalid/ valid*/ valid**	Q/-*/- **	No Cq/ (39,55)*/ No Cq**	No Cq/ No Cq*/ No Cq**	Invalid/ valid*/ valid**	Q/-*/- **	-	-	/	/	-	-	-	NA	-	NA	3	c		
2023	2639	Glace vanille macademia	Ice cream, flavour vanilla	-	No Cq	28,87	valid	-	No Cq	26,8	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	c		
2023	2640	Glace peanut butter	Ice cream, peanut butter	-	No Cq	29,35	valid	-	No Cq	26,82	valid	-	-	-	/	/	-	-	-	NA	-	NA	3	c		



VEGETABLES																													
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																				Category	Type			
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																								
					BACGene <i>Listeria</i> spp. - PCR result										Confirmation							CFX96 Touch™ (standard)		AriaMx™					
					CFX96 Touch™ (standard)					AriaMx™					Typical colonies				After purification step (from O&A or Palcam)			Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result			Agreement	Final result	Agreement
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests	Typical colonies	After purification step (from O&A or Palcam)											
Cq	result	Cq	result																										
2023	338	Ciboulette	Chives	-	No Cq	29,08	valid	-	No Cq	26,79	valid	-	-	-	/	/	-	-	NA	-	NA	4	a						
2023	339	Petits pois	Green peas	+	22,04	32,99	valid	+	17,16	29,52	valid	+	H+/H-	+	<i>L. mono</i> / <i>L. innocua</i>	+	/	+	+	PA	+	PA	4	a					
2023	343	Brocolis	Broccoli	+	No Cq	29,18	valid	-	No Cq	26,71	valid	-	st	-	/	/	-	-	ND	-	ND	4	a						
2023	577	Petit pois	Peas	-	No Cq	29,90	valid	-	No Cq	26,06	valid	-	-	-	/	/	-	-	NA	-	NA	4	a						
2023	579	Poireaux bio	Organic leek	-	No Cq	29,85	valid	-	No Cq	26,28	valid	-	-	-	/	/	-	-	NA	-	NA	4	a						
2023	1030	Petits pois bio	Organic peas	+	23,93	30,85	valid	+	19,78	28,02	valid	+	H+ni (+RLM)/H-	+	<i>L. mono</i> (RLM) / <i>L. innocua</i>	+	/	+	+	PA	+	PA	4	a					
2023	1172	Graines germées Alfalfa bio	Organic sprouts, Alfalfa	+	26,93	29,65	valid	+	21,95	25,92	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	a					
2023	1173	Mélange graines germées (Alfalfa, radis, fenouil)	Sprouts (alfalfa, radish, fennel)	+	28,34	29,82	valid	+	23,34	26,14	valid	+	H-	+	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	4	a					
2023	1174	Jeunes pousses mélange mesclun	Baby leaves (mix)	+	23,71	No Cq	Invalid	+	19,22	39,85	Invalid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	a					
2023	1175	Jeunes pousses mâche	Baby leaves (lamb's lettuce)	-	29,25	30,01	valid	+	24,13	26,29	valid	+	-	-	<i>L. seeligeri</i> (after Fraser 1)	+(after Fraser 1)	+(H-: <i>L. seeligeri</i> )	+	+	PD	+	PD	4	a					
2023	1176	Epinards frais	Fresh spinach	+	21,97	33,21	valid	+	17,58	27,85	valid	+	H-	-	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	4	a					
2023	1177	Epinards frais à cuire	Fresh spinach	+	25,32	30,19	valid	+	20,71	26,32	valid	+	-	-	<i>L. seeligeri</i> (after Fraser 1)	+(after Fraser 1)	+(H-: <i>L. seeligeri</i> )	+	+	PA	+	PA	4	a					
2023	1335	Haricots verts très fins surgelés	Frozen green beans	-	No Cq	29,97	valid	-	No Cq	25,63	valid	-	-	-	/	/	-	-	NA	-	NA	4	a						
2023	1337	Ciboulette	Chives	-	No Cq	29,66	valid	-	No Cq	25,35	valid	-	-	-	/	/	-	-	NA	-	NA	4	a						
2023	1341	Persil frisé	Curled p	-	No Cq	29,79	valid	-	No Cq	25,93	valid	-	-	-	/	/	-	-	NA	-	NA	4	a						
2023	1345	Persil plat	Parsley	-	No Cq	29,22	valid	-	No Cq	25,57	valid	-	st	-	/	/	-	-	NA	-	NA	4	a						
2023	1372	Graines germées Alfalfa, radis, fenouil bio	Sprouts (alfalfa, radish, fennel)	+	32,70	30,24	valid	+	26,93	25,82	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	a					
2023	1373	Graine germées Alfalfa bio	Sprouts (organic alfalfa)	+	25,37	30,17	valid	+	20,31	25,49	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	a					
2023	1374	Brocolis	Brocolis	-	37,10/ 38,19/ 37,52	29,74/ 30,11/ 30,45	valid/ valid/ valid	+/+	31,59/ 34,06/ 32,70	25,78/ 25,81/ 25,90	valid/ valid/ valid	+/+	st (x5)	-(x5)	/	/	-(-x5 after subculture)	-	-	PPNA	-	PPNA	4	a					
2023	1375	Céleri branche	Celery stalk	-	38,24/ 38,85/ 37,42	30,01/ 29,50/ 30,23	valid/ valid/ valid	+/+	33,13/ 34,11/ 33,46	25,63/ 25,18/ 26,00	valid/ valid/ valid	+/+	d/H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	4	a					
2023	1376	Navet violet	Purple turnip	+	26,57	29,71	valid	+	21,77	25,6	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	a					
2023	1377	Endive	Endive	-	39,54/ 39,07/ 38,71	29,81/ 29,99/ 29,92	valid/ valid/ valid	+/+	33,79/ 33,86/ 33,66	25,96/ 25,87/ 25,98	valid/ valid/ valid	+/+	d/+d	-	NC	/	+(H-: <i>L. grayi</i> )	+	+	PD	+	PD	4	a					
2023	1378	Chou	Cabbage	+	No Cq	29,64	valid	-	No Cq	25,50	valid	-	-	-	/	/	-	-	ND	-	ND	4	a						

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.

VEGETABLES																										
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																			Category	Type	
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation								CFX96 Touch™ (standard)		AriaMx™			
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement				
Cq	result	Cq	result	O&A (10 µL)		Palcam (10 µL)	Identification			Reference tests																
2023	1379	Jeunes pousses tendres (mâche, épinard, laitue verte et rouge)	Baby leaves (lamb's lettuce, spinach, lettuce)	-	No Cq	31,44	valid	-	No Cq	28,39	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	a		
2023	1476	Champignons entiers congelés	Frozen mushrooms	-	No Cq	29,48	valid	-	No Cq	25,63	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	a		
2023	1477	Poivrons rouges	Red pepper	+	31,08	29,33	valid	+	26,33	25,64	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	a		
2023	2172	Courgette	Zucchini	-	No Cq	28,78	valid	-	No Cq	25,94	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	a		
2023	2173	Brocolis	Broccolis	-	No Cq	28,78	valid	-	No Cq	26,07	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	a		
2023	323	Légumes ratatouille	Cooked vegetables	-	No Cq	29,28	valid	-	No Cq	27,05	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	b		
2023	324	Epinard haché à la crème	Ground spinach with cream	-	No Cq	29,25	valid	-	No Cq	26,61	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	b		
2023	340	Poêlée parisienne bio	Organic vegetables mix	-	31,84	29,40	valid	+	26,78	26,72	valid	+	-	-	<i>L. seeligeri</i> (72h)	+(72h)	<i>L. seeligeri</i>	+	+	PD	+	PD	4	b		
2023	341	Pomme de terre saladaise	Cooked potatoes	-	No Cq	29,01	valid	-	No Cq	26,82	valid	-	st	-	/	/	-	-	-	NA	-	NA	4	b		
2023	342	Printanière de légumes	Vegetables mix	-	No Cq	29,12	valid	-	No Cq	26,59	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	b		
2023	575	Buttergemuse (légumes au beurre)	Pre-cooked buttergemuse	-	No Cq	29,80	valid	-	No Cq	26,25	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	b		
2023	576	Aubergine grillée	Grilled eggplant	+	No Cq/40,70/40,52	30,16/29,20/29,22	valid/valid/valid	-/+/+	34,39/36,18/35,47	26,21/22,54/25,63	valid/valid/valid	+/+/+	-	-	/	/	+(H+: <i>L. mono</i> )	+	-	ND	+	PA	4	b		
2023	581	Poivrons jaunes grillés	Roasted yellow bell pepper	-	No Cq	30,03	valid	-	No Cq	26,46	valid	-	st	-	/	/	-	-	-	NA	-	NA	4	b		
2023	585	Poêlée du soleil tomate basilic	Vegetables mix (with tomato and basil)	+	No Cq	29,80	valid	-	No Cq	26,18	valid	-	st	-	/	/	-	-	-	ND	-	ND	4	b		
2023	840	Légumes vapeur pois épinards	Steamed cooked vegetables (peas and spinach)	+	22,78	30,43	valid	+	19,04	25,63	valid	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	/	+	+	PA	+	PA	4	b		
2023	1033	Palets poireaux carottes brocolis	Vegetables cake (leeks, carrots, broccoli)	+	No Cq	30,00	valid	-	No Cq	28,76	valid	-	-	-	/	/	-	-	-	ND	-	ND	4	b		
2023	1037	Palets de courgettes et petits légumes	Zucchini cake with other vegetables	-	33,44	30,75	valid	+	28,84	27,68	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	4	b		
2023	1047	Poivrons rouges lanières, blanchi	Cooked and sliced red pepper	-	No Cq	30,10	valid	-	No Cq	27,54	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	b		
2023	1180	Macédoine de légumes	Vegetable macédoine	+	29,36	29,70	valid	+	24,33	25,98	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	b		
2023	1181	Macédoine de légumes	Vegetable macédoine	+	32,24	30,02	valid	+	26,96	26,58	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	b		
2023	1184	Julienne de légumes surgelée (carottes, courgettes, concombre, céleri)	Frozen vegetables mix (carrots, zucchini, cucumber, celery)	-	No Cq	29,74	valid	-	No Cq	26,01	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	b		

VEGETABLES																													
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																				Category	Type			
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																								
					BACGene <i>Listeria</i> spp. - PCR result										Confirmation							CFX96 Touch™ (standard)		AriaMx™					
					CFX96 Touch™ (standard)					AriaMx™					Typical colonies				After purification step (from O&A or Palcam)			Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result			Agreement	Final result	Agreement
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests	Final result	Agreement											
Cq	result	Cq	result																										
2023	1185	Courge butternut en cubes surgelée	Frozen cut butternut	-	No Cq	29,67	valid	-	No Cq	26,58	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	b					
2023	1186	Légumes pour potage surgelés (choux fleur, carottes, poireaux, céleris, oignons)	Frozen vegetables mix (cauliflower, carrots, celery, onion, leeks)	-	No Cq	29,86	valid	-	No Cq	26,45	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	b					
2023	1333	Brocolis en fleurette	Sliced and cooked broccoli	-	28,88	29,42	valid	+	24,88	25,87	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PD	+	PD	4	b					
2023	1334	Brunoise méridionale	Pre-cooked vegetables mix	-	No Cq	30,01	valid	-	No Cq	26,23	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	b					
2023	1336	Mélange de légumes cuits	Cooked vegetables mix	-	No Cq	29,98	valid	-	No Cq	25,52	valid	-	-	-	/	/	-	-	-	NA	-	NA	4	b					
2023	1338	Mélange de légumes cuits	Cooked vegetables mix	+	24,62	30,01	valid	+	20,45	25,67	valid	+	H+/H-	+	<i>L. mono</i> / <i>L. innocua</i>	+	/	+	+	PA	+	PA	4	b					
2023	1339	Pomme de terre grenaille beurre sel	Cooked potatoes	-	No Cq	29,39	valid	-	36,82/ No Cq/ (36,31)	25,78/ 25,59/ 26,47	valid/ valid/ valid	+/-/-	-	-	/	/	-	-	-	NA	-	PPNA	4	b					
2023	1343	Poêlée parisienne bio	Organic pre-cooked vegetables mix	-	No Cq	29,96	valid	-	No Cq	25,48	valid	-	st	-	/	/	-	-	-	NA	-	NA	4	b					
2023	1344	Jardinière de légumes	Pre-cooked vegetables mix	-	No Cq	29,33	valid	-	No Cq	25,52	valid	-	st	-	/	/	-	-	-	NA	-	NA	4	b					
2023	1381	Ratatouille	Ratatouille	+	25,35	30,80	valid	+	20,37	25,9	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	b					
2023	1382	Cœur de laitue en sachet	Bagged lettuce	+	40,04	29,95	valid	+	33,35	25,87	valid	+	+H(5)	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	b					
2023	1388	Macédoine de légumes	Vegetable macedoine	+	No Cq	30,26	valid	-	No Cq	26,19	valid	-	-	-	/	/	-	-	-	ND	-	ND	4	b					
2023	330	Guacamole	Guacamole	-	No Cq/ No Cq/ No Cq	32,06/ 30,51/ 30,77	valid/ valid/ valid	-/-/-	38,79/ 27,45/ (37,28)	30,02/ 27,85/ 29,06	valid/ valid/ valid	-/+/-	-	-	/	/	-	-	-	NA	-	NA	4	c					
2023	1178	Houmous de poivrons	Bell pepper hummus	+	23,80	32,55	valid	+	19,03	27,91	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	c					
2023	1179	Guacamole	Guacamole	+	28,77	31,70	valid	+	24,3	28,69	valid	+	H-d/H-	-	<i>L. seeligeri</i>	+	+(H-)	+	+	PA	+	PA	4	c					
2023	1182	Choux fleur à croquer	Cauliflower ready to eat	+	27,04	29,62	valid	+	21,95	26,08	valid	+	H+	+	<i>L. mono</i> <i>L. seeligeri</i> (after Fraser)	+	+(H+/H-: <i>L. seeligeri</i> )	+	+	PA	+	PA	4	c					
2023	1183	Baby carottes à croquer	Baby carrots ready to eat	-	28,79	29,59	valid	+	23,83	26,05	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	4	c					
2023	1380	Tartare de légumes	Vegetable tartar	+	29,79	30,15	valid	+	24,46	26	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	c					
2023	1383	Caviar d'aubergine	Eggplant caviar	+	27,90	29,95	valid	+	23,16	26,67	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	c					
2023	1384	Caviar d'aubergine	Eggplant caviar	+	27,17	30,73	valid	+	22,4	26,44	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	c					
2023	1389	Coleslaw	Coleslaw	+	27,91	29,98	valid	+	23,05	26,53	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	c					
2023	1390	Tapenade d'olives vertes	Tapenade of green olives	-	No Cq	29,74	valid	-	No Cq	26,16	valid	-	st	-	/	/	-	-	-	NA	-	NA	4	c					
2023	1391	Tapenade d'olives noires	Tapenade of black olives	+	No Cq	29,94	valid	-	No Cq	26,04	valid	-	st	st	/	/	-	-	-	ND	-	ND	4	c					



VEGETABLES																										
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				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result						Confirmation										CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)			AriaMx™			Typical colonies				After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement				
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
2023	1392	Olives noires à la grecque		Black olives	-	No Cq		30,31	valid	-	No Cq	26,89	valid	-	st	st	/	/	-	-	-	NA	-	NA	4	c
2023	1393	Olives vertes dénoyautées	Green olives	-	No Cq	29,98	valid	-	No Cq	26,41	valid	-	st	st	/	/	-	-	-	NA	-	NA	4	c		
2023	1394	Tartinade d'artichaud	Artichoke RTE food	-	23,09	35,57	valid	+	18,45	29,77	Invalid	+	H-	+	<i>L. seeligeri</i>	+	+(H-)	+	+	PD	+	PD	4	c		
2023	1395	Tartinade de poivrons confits	Pepper RTE food	+	30,17	31,51	valid	+	24,93	27,49	valid	+	H-d	+(1)	<i>L. seeligeri</i>	+	+(H-)	+	+	PA	+	PA	4	c		
2023	1460	Salade boulgour, lentilles, potiron	Vegetables salad (bulgur, lentil, pumpkin)	+	26,40	30,09	valid	+	22,03	25,85	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	c		
2023	1461	Salade lentilles, oignons	Vegetables salad (lentil, onions)	-	24,04	32,74	valid	+	20,5	25,8	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	4	c		
2023	1462	Carottes râpées citronnées	Sliced and seasoned carrots	-	No Cq	29,08	valid	-	No Cq	25,52	valid	-	st	-	/	/	-	-	-	NA	-	NA	4	c		
2023	1463	Macédoine aux 5 légumes	Vegetables macedoine	+	23,87	30,20	valid	+	20,09	25,5	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	c		
2023	1464	Tartinade houmous poivrons	Hummus and pepper RTE food	-	23,39	31,12	valid	+	19,06	26,09	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	4	c		
2023	1465	Tartinade houmous	Hummus RTE food	+	21,34	34,51	valid	+	17,35	27,66	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	4	c		
2023	2728	Tartinade caviar d'aubergines	RTE vegetable, eggplant caviar	-	No Cq	30,05	valid	-	No Cq	26,19	valid	-	st	-	/	/	-	-	-	NA	-	NA	4	c		
2023	2729	Tartinades tomates confites à l'origan	RTE vegetable, tomatoes with oregano	-	No Cq	29,90	valid	-	No Cq/No Cq*/No Cq**	No Cq/26,18*/26,14**	Invalid/valid*/valid**	Q/-*/- **	-	-	/	/	-	-	-	NA	-	NA	4	c		

## SEAFOOD AND FISHERY PRODUCTS

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*  <i>Listeria</i> spp final result	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																			Category	Type	
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation								CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement				
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
2023	427	Beau filet de colin nature cru		Raw fish filet	+	31,61		29,51	valid	+	26,81	24,98	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	5	a
2023	437	Pavé de saumon Ecosse	Raw salmon filet (Scottish)	-	33,82	29,68	valid	+	28,88	25,9	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	5	a		
2023	438	Pavé de saumon	Raw salmon filet	-	No Cq	31,35	valid	-	No Cq	27,3	valid	-	st	st	/	/	-	-	-	NA	-	NA	5	a		
2023	439	Dos de colin d'Alaska nature (cru)	Raw fish filet	+	25,04	29,54	valid	+	20,79	25,6	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	5	a		
2023	588	Crevettes entières	Whole shrimp	-	No Cq	30,19	valid	-	No Cq	27,34	valid	-	-	-	/	/	-	-	-	NA	-	NA	5	a		
2023	589	Chair grattée de saumon	Raw salmon pulp	+	34,43	30,12	valid	+	28,58	26,78	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	5	a		
2023	590	Dos de colin d'Alaska	Raw fish filet	+	23,84	30,71	valid	+	19,22	26,12	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	5	a		
2023	591	Chair de saumon	Raw salmon pulp	+	No Cq	30,75	valid	-	No Cq	27,25	valid	-	-	st	/	/	-	-	-	ND	-	ND	5	a		
2023	592	Pavé de saumon Ecosse	Raw salmon filet (Scottish)	-	No Cq	30,32	valid	-	No Cq	26,83	valid	-	-	st	/	/	-	-	-	NA	-	NA	5	a		
2023	1036	Crevettes décortiquées crues	Raw peeled shrimp	-	No Cq	29,94	valid	-	No Cq	27,59	valid	-	-	-	/	/	-	-	-	NA	-	NA	5	a		
2023	1328	Crevettes crues congelées	Frozen raw shrimp	-	No Cq	31,28	valid	-	No Cq	28,19	valid	-	-	-	/	/	-	-	-	NA	-	NA	5	a		
2023	1329	Crevettes décortiquées	Raw peeled shrimp	+	29,20	29,13	valid	+	24,9	25,51	valid	+	H+/H-	+	<i>L. mono</i> / <i>L. innocua</i>	+	/	+	+	PA	+	PA	5	a		
2023	1330	Crevettes décortiquées	Raw peeled shrimp	+	31,39	29,44	valid	+	26,65	25,52	valid	+	H+/H-	+	<i>L. mono</i> / <i>L. innocua</i>	+	/	+	+	PA	+	PA	5	a		
2023	1482	Tranche de colin nature	Raw fish filet	-	No Cq	29,10	valid	-	No Cq	25,81	valid	-	-	st	/	/	-	-	-	NA	-	NA	5	a		
2023	1668	Dos d'Eglefin	Fish filet	-	No Cq	30,00	valid	-	No Cq	25,43	valid	-	st	st	/	/	-	-	-	NA	-	NA	5	a		
2023	1669	Pavé de saumon	Salmon filet	-	No Cq	30,39	valid	-	No Cq	25,97	valid	-	st	st	/	/	-	-	-	NA	-	NA	5	a		
2023	1671	Cocktail de fruits de mer (encornets, crevettes, moules)	Seafood cocktail	-	No Cq	29,64	valid	-	No Cq	25,74	valid	-	-	-	/	/	-	-	-	NA	-	NA	5	a		
2023	2174	Noix de Saint Jacques	Scallop	+	27,52	28,81	valid	+	23,76	25,91	valid	+	H+/H-	+	<i>L. mono</i> / <i>L. innocua</i>	+	/	+	+	PA	+	PA	5	a		
2023	2175	Filet de Merlan	Fish filet	-	No Cq	28,86	valid	-	No Cq	25,6	valid	-	-	-	/	/	-	-	-	NA	-	NA	5	a		
2023	2176	Filet de Lieu noir	Fish filet	-	19,22	34,30	valid	+	15,81	27,94	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PD	+	PD	5	a		
2023	443	Saumon fumé d'atlantique	Smoked salmon filet	+	No Cq	29,84	valid	-	No Cq	25,75	valid	-	-	-	/	/	-	-	-	ND	-	ND	5	b		
2023	1040	Truite fumée	Smoked trout filet	-	34,04	30,00	valid	+	29,68	27,74	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	5	b		
2023	1044	Saumon fumé Ecosse	Smoked salmon filet (Scottish)	+	No Cq	31,24	valid	-	No Cq	29,79	valid	-	-	-	/	/	-	-	-	ND	-	ND	5	b		
2023	1046	Saumon fumé bio	Organic smoked salmon filet	+	21,82	35,67	valid	+	17,29	34,21	valid	+	H-	-	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	5	b		
2023	1187	Saumon fumé de Norvège	Smoked salmon (Norway)	+	28,98	30,00	valid	+	24,44	26,77	valid	+	H-	+	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	5	b		

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.

## SEAFOOD AND FISHERY PRODUCTS

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																			Category	Type	
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation								CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies				After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result			Agreement
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
	Cq	result			Cq	result																				
2023	1190	Saumon fumé Ecosse Irlande bio	Organic smoked salmon	-	No Cq	29,93	valid	-	No Cq	26,59	valid	-	-	-	/	/	-	-	NA	-	NA	5	b			
2023	1192	Filet de saumon fumé Norvège	Smoked salmon (Norway)	-	No Cq	29,82	valid	-	No Cq	26,63	valid	-	-	-	/	/	-	-	NA	-	NA	5	b			
2023	1331	Saumon fumé norvégien en tranche	Sliced smoked salmon	-	No Cq	29,93	valid	-	No Cq	26,85	valid	-	-	-	/	/	-	-	NA	-	NA	5	b			
2023	1661	Truite fumée des Pyrénées	Smoked trout	-	No Cq	29,76	valid	-	No Cq	25,86	valid	-	st	-	/	/	-	-	NA	-	NA	5	b			
2023	1850	Truite fumée Bretagne	Smoked trout	+	20,78	34,43	valid	+	15,92	28,1	valid	+	H-	+	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	5	b		
2023	1851	Saumon fumé	Smoked salmon	+	26,53	29,25	valid	+	22,04	25,7	valid	+	H+/H-	+	<i>L. mono/ L. innocua</i>	+	/	+	+	PA	+	PA	5	b		
2023	1858	Lardons de saumon fumé	Smoked sliced salmon	-	No Cq	29,39	valid	-	No Cq	26,35	valid	-	-	st	/	/	-	-	NA	-	NA	5	b			
2023	1859	Saumon fumé élevé en Norvège	Smoked salmon	-	No Cq	30,27	valid	-	No Cq	27,23	valid	-	-	-	/	/	-	-	NA	-	NA	5	b			
2023	1860	Truite fumée Bretagne	Smoked trout	-	No Cq	29,27	valid	-	No Cq	25,98	valid	-	st	-	/	/	-	-	NA	-	NA	5	b			
2023	1861	Truite fumée mini tranches	Smoked sliced trout	-	31,11	29,46	valid	+	26,6	26,45	valid	+	H-	-	<i>L. welshimeri</i>	+	+(H-)	+	+	PD	+	PD	5	b		
2023	1862	Filet de harengs fumé doux	Smoked herring	+	No Cq	29,26	valid	-	No Cq	26,13	valid	-	st	st	/	/	-	-	ND	-	ND	5	b			
2023	1863	Filet de harengs fumé classique	Smoked herring	-	No Cq	29,17	valid	-	No Cq	26,06	valid	-	st	st	/	/	-	-	NA	-	NA	5	b			
2023	2177	Brisures de saumon fumé au bois de hêtre	Smoked salmon	-	No Cq	29,05	valid	-	No Cq	26,59	valid	-	-	-	/	/	-	-	NA	-	NA	5	b			
2023	2178	Truite fumée en mini-tranches	Smoked sliced trout	+	26,88	28,95	valid	+	23,4	26,52	valid	+	H-	-	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	5	b		
2023	2179	Filet de harengs fumés au bois de hêtre (doux)	Smoked herring	-	No Cq	28,92	valid	-	No Cq	26,38	valid	-	-	-	/	/	-	-	NA	-	NA	5	b			
2023	2408	Truite fumée	Smoked trout	+	22,22	31,41	valid	+	18,1	30,37	valid	+	H-	+	<i>L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	5	b		
2023	2409	Truite fumée, Pyrénées	Smoked trout	-	No Cq	29,29	valid	-	No Cq	28,88	valid	-	st	st	/	/	-	-	NA	-	NA	5	b			
2023	2410	Saumon fumé Ecosse Label rouge	Smoked salmon	+	17,22	No Cq	Invalid	+	13,68	No Cq	Invalid	+	H+ni/H-	+	<i>L. mono/ L. welshimeri</i>	+	+(H-)	+	+	PA	+	PA	5	b		
2023	2411	Saumon fumé Ecosse	Smoked salmon	+	19,41	40,08	Invalid	+	15,59	No Cq	Invalid	+	H+/H-	+	<i>L. mono L. welshimeri</i>	+	/	+	+	PA	+	PA	5	b		
2023	2412	Saumon fumé chair crue	Smoked salmon	+	23,75	32,96	valid	+	19,63	30,9	valid	+	H+/H-	+	<i>L. mono/ L. innocua</i>	+	/	+	+	PA	+	PA	5	b		
2023	334	Filet merlu sauce vierge	Cooked fish with sauce	-	35,51	29,24	valid	+	30,99	26,77	valid	+	H+d/H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	5	c		
2023	335	Panê de cabillaud bio	Breaded organic fish	+	29,79	29,35	valid	+	24,82	26,75	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	5	c		
2023	424	Crevettes cuites entières décortiquées	Peeled whole cooked shrimp	+	31,00	29,89	valid	+	26,21	25,76	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	5	c		
2023	425	Portion de lieu noir cuit	RTRH fish filet	-	No Cq	29,68	valid	-	No Cq	25,31	valid	-	st	st	/	/	-	-	NA	-	NA	5	c			

## SEAFOOD AND FISHERY PRODUCTS

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					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation								CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement				
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
2023	426	Aiguillettes de colin pané		RTRH breaded fish filet	+	28,93		29,66	valid	+	24,38	25,2	valid	+	H-	-	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	5	c
2023	428	Paupiette de saumon	RTRH salmon filet	-	32,47	30,43	valid	+	27,83	26,72	valid	+	H-	-	<i>L. innocua</i>	+	+(H+: <i>L. mono</i> )	+	+	PD	+	PD	5	c		
2023	430	Coquilles Saint Jacques	RTRH scallop	-	No Cq	29,85	valid	-	No Cq	25,51	valid	-	-	-	/	/	-	-	-	NA	-	NA	5	c		
2023	440	Pavé de poisson blanc cuit sauce napolitaine	RTRH fish filet (Neapolitan sauce)	-	No Cq	29,57	valid	-	(38,88)	25,04	valid	-	st	-	/	/	-	-	-	NA	-	NA	5	c		
2023	441	Dos de colin d'Alaska nature (cuit)	Cooked fish filet	+	20,86	33,14	valid	+	16,8	26,46	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	5	c		
2023	442	Crevettes cuites entières	Whole cooked shrimp	-	33,05	29,71	valid	+	28,14	25,86	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	5	c		
2023	587	Queues de crevettes pannées	Breaded shrimp tail	-	No Cq	29,61	valid	-	No Cq	26,25	valid	-	-	-	/	/	-	-	-	NA	-	NA	5	c		
2023	593	Pavé colin topping napolitain précuit	RTRH fish filet (Neapolitan sauce)	-	34,56	29,82	valid	+	29,51	25,92	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PD	+	PD	5	c		
2023	594	Pavé colin topping épinard	RTRH fish filet (spinach sauce)	-	No Cq	29,72	valid	-	No Cq	26,52	valid	-	st	-	/	/	-	-	-	NA	-	NA	5	c		
2023	833	Colin pané	Breaded fish filet	-	31,08	29,50	valid	+	26,28	25,4	valid	+	H+/H-	+	<i>L. mono</i> <i>L. welshimeri</i>	+	/	+	+	PD	+	PD	5	c		
2023	1031	Brochette de poisson pané	Breaded fish filet	-	No Cq	29,75	valid	-	No Cq	27,61	valid	-	-	-	/	/	-	-	-	NA	-	NA	5	c		
2023	1032	Filet de truite meunière	RTRH fish filet (with sauce)	-	29,13	29,92	valid	+	25,34	27,6	valid	+	H+/H-	+	<i>L. mono</i> <i>L. innocua</i>	+	/	+	+	PD	+	PD	5	c		
2023	1188	Brochette de poisson pané	Breaded fish filet	+	29,69	30,08	valid	+	24,82	26,43	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	5	c		
2023	1332	Filet de truite meunière bio	RTRH fish filet with sauce	-	33,99	29,63	valid	+	29,73	25,81	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PD	+	PD	5	c		
2023	1466	Filet de poisson pané	Breaded fish filet	+	24,44	30,51	valid	+	20,39	25,86	valid	+	H+	+	<i>L. mono</i>	+	+(H+/H- ( <i>L. innocua</i> ))	+	+	PA	+	PA	5	c		
2023	1467	Filet de poisson pané	Breaded fish filet	+	29,82	29,56	valid	+	25,14	25,81	valid	+	H+/H-	+	<i>L. mono</i> / <i>L. innocua</i>	+	/	+	+	PA	+	PA	5	c		
2023	1483	Dos de colin d'Alaska nature cuit	Cooked fish filet	+	26,68	29,06	valid	+	22,34	25,45	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	5	c		
2023	1670	Moules à la marinière et pomme de terre	RTRH seafood (mussels with potatoes)	-	No Cq	29,71	valid	-	No Cq	25,43	valid	-	-	-	/	/	-	-	-	NA	-	NA	5	c		
2023	2730	Surimi en bâtonnets	RTE fish product, surimi	-	No Cq	29,41	valid	-	No Cq	25,84	valid	-	st	-	/	/	-	-	-	NA	-	NA	5	c		
2023	2731	Bâtonnets saveur crabe	RTE fish product, surimi	-	No Cq	29,14	valid	-	No Cq	25,86	valid	-	st	-	/	/	-	-	-	NA	-	NA	5	c		



## PRODUCTION ENVIRONMENTAL SAMPLES

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																		Category	Type		
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result									Confirmation							CFX96 Touch™ (standard)				AriaMx™	
					CFX96 Touch™ (standard)			AriaMx™			Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement						
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
2023	832	Déchets production saumon (industrie de produits de la mer)		Waste, salmon filet (Seafood industry)	+	26,73		29,39	valid	+	22,24	25,59	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	a
2023	1038	Chute de parage saumon (industrie de produits de la mer)	Waste, salmon (Seafood industry)	+	31,75	30,05	valid	+	27,31	27,7	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	a		
2023	1039	Déchets de porc ramassés au sol (industrie de produits carnés)	Waste, pork meat (meat products industry)	+	34,38	32,52	valid	+	30,14	30,42	valid	+	H+d/H-	+	<i>L. mono/ L. welshimeri</i>	+	/	+	+	PA	+	PA	6	a		
2023	1662	Déchet de production Morue (industrie de produits de la mer)	Waste, fish (seafood industry)	+	35,64	29,59	valid	+	31,31	25,45	valid	+	H+dni/H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	a		
2023	1663	Déchet de production Brandade sous doseuse (industrie de produits de la mer)	Waste, fish (seafood industry)	+	22,68	32,01	valid	+	18,1	26,08	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	a		
2023	1664	Déchet de production merlu pomme de terre cidre (industrie de produits de la mer)	Waste, fish and potatoes (seafood industry)	-	No Cq	29,71	valid	-	No Cq	25,51	valid	-	H-d(1)ni/-	-	/	/	-	-	-	NA	-	NA	6	a		
2023	1900	Déchets découpe porc (production saucisse)	Waste, pork meat (production of sausage)	-	33,18	29,35	valid	+	28,23	25,23	valid	+	H-	+	<i>L. welshimeri</i>	+	+(H-)	+	+	PD	+	PD	6	a		
2023	1901	Déchets découpe porc (production saucisse)	Waste, pork meat (production of sausage)	+	24,05	29,88	valid	+	19,79	25,11	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	6	a		
2023	1902	Déchets de plats préparés, riz espagnol (industrie de plats préparés)	Waste, RTRH food with rice (RTRH food industry)	+	21,59	32,36	valid	+	17,61	26,59	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	6	a		
2023	1903	Déchets de plats préparés, sauce champignons (industrie de plats préparés)	Waste, RTRH food with mushrooms sauce (RTRH food industry)	+	21,44	33,06	valid	+	17,07	26,31	valid	+	H+/H-	+	<i>L. mono/ L. welshimeri</i>	+	/	+	+	PA	+	PA	6	a		
2023	1904	Déchets de plats préparés, crêpes bretonnes (industrie de plats préparés)	Waste, RTRH food pancake (RTRH food industry)	+	No Cq	30,62	valid	-	No Cq	26,88	valid	-	-	-	/	/	-	-	-	ND	-	ND	6	a		
2023	2398	Déchet produit carné (production de jambon saumuré)	Waste, meat product (production of ham)	+	No Cq	30,17	valid	-	No Cq	28,02	valid	-	-	-	/	/	-	-	-	ND	-	ND	6	a		

## PRODUCTION ENVIRONMENTAL SAMPLES

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1*	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp																		Category	Type		
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result									Confirmation							CFX96 Touch™ (standard)				AriaMx™	
					CFX96 Touch™ (standard)			AriaMx™			Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement						
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
2023	2399	Déchet produit carné (production de chipolatas)	Waste, meat product (production of sausage)	-	No Cq	29,66	valid	-	No Cq	28,32	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	a		
2023	2400	Déchet produit carné 2 (production de jambon saumuré)	Waste, meat product (production of ham)	+	No Cq	29,61	valid	-	No Cq	27,87	valid	-	-	-	/	/	-	-	-	ND	-	ND	6	a		
2023	2401	Déchet produit carné (production de chipolatas)	Waste, meat product (production of sausage)	-	No Cq	29,15	valid	-	No Cq	28,55	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	a		
2023	2616	Poussière aspirateur (industrie de produits laitiers)	Vacuum dusts (dairy product industry)	-	No Cq	29,58	valid	-	No Cq	27,2	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	a		
2023	2617	Poussière aspirateur (industrie de produits laitiers)	Vacuum dusts (dairy product industry)	-	No Cq	28,67	valid	-	No Cq	25,65	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	a		
2023	2618	Poussière aspirateur (industrie de produits laitiers)	Vacuum dusts (dairy product industry)	-	No Cq	35,71	valid	-	No Cq	30,93	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	a		
2023	2619	Poussière aspirateur (industrie de produits laitiers)	Vacuum dusts (dairy product industry)	-	No Cq	28,64	valid	-	No Cq	25,54	valid	-	st	-	/	/	-	-	-	NA	-	NA	6	a		
2023	2732	Déchets de crevettes (industrie de fruits de mer)	Waste, shrimps (seafood industry)	-	No Cq	29,24	valid	-	No Cq	25,99	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	a		
2023	837	Eau de process laveur automatique (industrie de produits de la mer)	Process water (seafood industry)	+	21,16	32,62	valid	+	16,84	28,37	valid	+	H-	+	<i>L. innocua</i>	+	+(H-)	+	+	PA	+	PA	6	b		
2023	969	Eau dessalage rampe (industrie de produits de la mer)	Process water (seafood industry)	-	No Cq	29,40	valid	-	No Cq	26,64	valid	-	st	st	/	/	-	-	-	NA	-	NA	6	b		
2023	1028	Eau de process, égout (industrie d'herbes aromatiques)	Process water (aromatic herbs industry)	+	36,09	30,12	valid	+	30,06	28,51	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	b		
2023	1327	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	+	No Cq	30,21	valid	-	No Cq	25,61	valid	-	-	-	/	/	-	-	-	ND	-	ND	6	b		
2023	1470	Eau de process, cuisine (industrie de produits de la mer)	Process water, kitchen (Seafood industry)	-	No Cq	29,14	valid	-	No Cq	25,66	valid	-	st	st	/	/	-	-	-	NA	-	NA	6	b		
2023	1471	Eau de process, décongélation (industrie de produits de la mer)	Process water, thawing zone (Seafood industry)	-	38,29	29,16	valid	+	34,02	25,62	valid	+	H+	+	<i>L. ivanovii</i>	+	+(H+)	+	+	PD	+	PD	6	b		

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					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																							
					BACGene <i>Listeria</i> spp. - PCR result								Confirmation								CFX96 Touch™ (standard)		AriaMx™					
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies				After purification step (from O&A or Palcam)				Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result			Agreement	Final result	Agreement
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests												
Cq	result	Cq	result																									
2023	1472	Eau rinçage, étripage avant nettoyage (industrie produits de la mer)	Rinse water, before cleaning (Seafood industry)	-	No Cq	28,96	valid	-	No Cq	25,48	valid	-	st	st	/	/	-	-	-	NA	-	NA	6	b				
2023	1473	Eau décongélation avant nettoyage (industrie produits de la mer)	Thawing water, before cleaning (Seafood industry)	-	No Cq	29,17	valid	-	No Cq	25,66	valid	-	-(2)	-	/	/	-	-	-	NA	-	NA	6	b				
2023	1474	Eau de process FRAGA (industrie produits de la mer)	Process water (Seafood industry)	-	No Cq	34,01	valid	-	No Cq	33,05	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	b				
2023	1475	Eau de rinçage, laveur (industrie produits de la mer)	Rinse water, washing machine (Seafood industry)	-	No Cq	29,15	valid	-	No Cq	25,63	valid	-	st	st	/	/	-	-	-	NA	-	NA	6	b				
2023	1479	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	+	26,56	29,01	valid	+	22,13	25,17	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	b				
2023	1480	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	-	No Cq	28,97	valid	-	No Cq	25,62	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	b				
2023	1485	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	-	No Cq	29,02	valid	-	No Cq	25,65	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	b				
2023	1486	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	+	25,94	28,86	valid	+	21,85	25,49	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	b				
2023	1487	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	-	26,12	28,97	valid	+	21,72	25,38	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	6	b				
2023	1672	Eau de process, cuve de refroidissement (industrie de produits carnés)	Process water (meat products industry)	+	23,05	31,54	valid	+	18,58	25,75	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	b				
2023	2258	Eau de rinçage (production steak végétal + nuggets)	Rinse water (production of vegetable steak)	+	29,40	29,55	valid	+	24,27	25,71	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	b				
2023	2260	Eau de rinçage (production porc saumuré jambon)	Rinse water (production of pork meat product)	-	No Cq/ No Cq/ No Cq	30,07/ 30,21/ 29,68	valid/ valid/ valid	-/-/ -/-/ -/-	No Cq/ No Cq/ No Cq	25,50/ 25,29/ 25,23	valid/ valid/ valid	-/-/ -/-/ -/-	H+(1)	-(1)	<i>L. mono</i>	+	/	+	-	NA	-	NA	6	b				



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					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result									Confirmation							CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)				AriaMx™					Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement			
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
	Cq	result			Cq	result																				
2023	2814	Eau de rinçage, épineuse (industrie de produits de la mer)	Rinse water, instrument (seafood industry)	-	No Cq	28,75	valid	-	No Cq	25,15	valid	-	st	st	/	/	-	-	-	NA	-	NA	6	b		
2023	2815	Eau de rinçage, mélangeur/batteur zone 1 (production sardines)	Rinse water, blender, zone 1 (production of sardines)	+	No Cq	28,70	valid	-	No Cq	25	valid	-	st	st	/	/	-	-	-	ND	-	ND	6	b		
2023	2816	Eau de rinçage, mélangeur/batteur zone 2 (production sardines)	Rinse water, blender, zone 2 (production of sardines)	-	No Cq	28,69	valid	-	No Cq	25,28	valid	-	st	st	/	/	-	-	-	NA	-	NA	6	b		
2023	970	Chiffonnette intérieur trancheur après nettoyage (industrie de produits de la mer)	Wipe, after cleaning (seafood industry)	-	No Cq	29,13	valid	-	No Cq	26,71	valid	-	st	st	/	/	-	-	-	NA	-	NA	6	c		
2023	971	Chiffonnette tapis trancheur après nettoyage (industrie de produits de la mer)	Wipe, after cleaning (seafood industry)	-	No Cq	29,20	valid	-	No Cq	26,37	valid	-	st	st	/	/	-	-	-	NA	-	NA	6	c		
2023	972	Chiffonnette tapis accélérateur avant nettoyage (industrie de produits de la mer)	Wipe, before cleaning (seafood industry)	-	No Cq	29,18	valid	-	No Cq	26,41	valid	-	st	-	/	/	-	-	-	NA	-	NA	6	c		
2023	973	Chiffonnette trancheur food service avant nettoyage (industrie de produits de la mer)	Wipe, before cleaning (seafood industry)	-	No Cq	29,07	valid	-	No Cq	26,42	valid	-	st	-	/	/	-	-	-	NA	-	NA	6	c		
2023	974	Chiffonnette trancheur slice avant nettoyage (industrie de produits de la mer)	Wipe, before cleaning (seafood industry)	-	No Cq	29,04	valid	-	No Cq	26,36	valid	-	st	-	/	/	-	-	-	NA	-	NA	6	c		
2023	975	Chiffonnette rouleau trancheur slice avant nettoyage (industrie de produits de la mer)	Wipe, before cleaning (seafood industry)	-	No Cq	29,15	valid	-	No Cq	26,37	valid	-	st	-	/	/	-	-	-	NA	-	NA	6	c		
2023	1468	Chiffonnette avant nettoyage, tapis étrépage (industrie de produits de la mer)	Wipe before cleaning (Seafood industry)	-	No Cq	29,21	valid	-	No Cq	25,53	valid	-	st	st	/	/	-	-	-	NA	-	NA	6	c		
2023	1469	Chiffonnette avant nettoyage, tapis emboitage (industrie de produits de la mer)	Wipe before cleaning (Seafood industry)	-	No Cq	29,15	valid	-	No Cq	25,45	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	c		

## PRODUCTION ENVIRONMENTAL SAMPLES

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				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																					
					BACGene <i>Listeria</i> spp. - PCR result									Confirmation							CFX96 Touch™ (standard)				AriaMx™	
					CFX96 Touch™ (standard)			AriaMx™			Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement						
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests															
2023	1665	Chiffonnette avant nettoyage, seau blanc laverie 10 (industrie de produits de la mer)	Wipe before cleaning (Seafood industry)	-	No Cq	29,78	valid	-	No Cq	25,37	valid	-	st	-	/	/	-	-	-	NA	-	NA	6	c		
2023	1666	Chiffonnette avant nettoyage, seau blanc laverie 11 (industrie de produits de la mer)	Wipe before cleaning (Seafood industry)	-	No Cq	30,00	valid	-	No Cq	25,32	valid	-	st	st	/	/	-	-	-	NA	-	NA	6	c		
2023	1667	Chiffonnette avant nettoyage, seau blanc laverie 12 (industrie de produits de la mer)	Wipe before cleaning (Seafood industry)	-	No Cq	30,12	valid	-	No Cq	25,24	valid	-	-	-	/	/	-	-	-	NA	-	NA	6	c		
2023	1886	Chiffonnette table de travail, après nettoyage (production steak végétal)	Wipe, working table, after cleaning (production of vegetable steak)	+	38,60	29,43	valid	+	33,55	25,6	valid	+	H+(5)	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	c		
2023	1887	Chiffonnette paillasse, après nettoyage (production steak végétal)	Wipe, working table, after cleaning (production of vegetable steak)	+	35,74	29,25	valid	+	30,95	26,01	valid	+	H+	-	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	c		
2023	1888	Chiffonnette raclette, après nettoyage (industrie de plats préparés)	Wipe, after cleaning (RTRH food industry)	-	No Cq/ 37,97/ No Cq	29,46/ 29,63/ 29,73	valid/ valid/ valid	-/+/-	31,34	26,13	valid	+	H+	+	<i>L. mono</i>	+	/	+	-	NA	+	PD	6	c		
2023	1889	Chiffonnette bac gris, après nettoyage (industrie de plats préparés)	Wipe, after cleaning (RTRH food industry)	+	29,17	29,31	valid	+	24,69	25,59	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	c		
2023	1890	Chiffonnette seau blanc, après nettoyage (industrie de plats préparés)	Wipe, after cleaning (RTRH food industry)	+	26,81	29,40	valid	+	22,63	25,37	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	c		
2023	1891	Chiffonnette tapis étripage, après nettoyage (industrie de produits de la mer)	Wipe, after cleaning (RTRH food industry)	+	32,83	29,34	valid	+	29	25,58	valid	+	H-d	+	<i>L. seeligeri</i>	+	/	+	+	PA	+	PA	6	c		
2023	1892	Eponge tapis emboitage, après nettoyage (industrie de produits de la mer)	Sponge, after cleaning (seafood industry)	+	32,88	29,17	valid	+	28,37	25,51	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA	6	c		

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				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																			
					BACGene <i>Listeria</i> spp. - PCR result						Confirmation								CFX96 Touch™ (standard)		AriaMx™			
					CFX96 Touch™ (standard)			AriaMx™			Typical colonies		After purification step (from O&A or Palcam)		Negative samples (Subculture in Fraser - ISO 16140-2 requirements)	All confirmatory tests	Final result	Agreement	Final result	Agreement				
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Identification	Reference tests													
2023	1893	Eponge plateau, après nettoyage (industrie de produits de la mer)		Sponge, after cleaning (seafood industry)	+	34,43		29,19	valid	+	30,38	25,41	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PA	+	PA
2023	2402	Chiffonnette cutter avant nettoyage (production chipolatas)	Wipe, before cleaning, cutter (production of sausage)	-	No Cq	28,98	valid	-	No Cq	28,28	valid	-	st	-	/	/	-	-	-	NA	-	NA	6	c
2023	2403	Chiffonnette hall avant nettoyage (production chipolatas)	Wipe, before cleaning, hall (production of sausage)	+	No Cq	28,98	valid	-	No Cq	27,78	valid	-	-	-	/	/	-	-	-	ND	-	ND	6	c
2023	2404	Chiffonnette cutter avant nettoyage (production chipolatas)	Wipe, before cleaning, cutter (production of sausage)	+	No Cq	29,17	valid	-	No Cq	27,55	valid	-	-	-	/	/	-	-	-	ND	-	ND	6	c
2023	2405	Chiffonnette table avant nettoyage (production chipolatas)	Wipe, before cleaning, working table (production of sausage)	-	No Cq	29,05	valid	-	No Cq	27,55	valid	-	st	-	/	/	-	-	-	NA	-	NA	6	c
2023	2813	Ecouvillon, épineuse (industrie de produits de la mer)	Swab, instrument (seafood industry)	-	29,30	28,66	valid	+	24,22	24,98	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	6	c
2023	2817	Ecouvillon étaleur (production pâte fine)	Swab, instrument to spread (production of paste)	-	30,05	28,71	valid	+	25,02	25,11	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	6	c
2023	2818	Ecouvillon plan de travail (production de mousse de foie de porc)	Swab, working table (production of pork pâté)	-	28,55	28,47	valid	+	24,15	25,53	valid	+	H+	+	<i>L. mono</i>	+	/	+	+	PD	+	PD	6	c
2023	2819	Ecouvillon mélangeur (production de mousse de foie de porc)	Swab, mixer (production of pork pâté)	+	No Cq	28,53	valid	-	No Cq	25,36	valid	-	st	st	/	/	-	-	-	ND	-	ND	6	c

COMPOSITE FOODS / READY-TO-EAT AND READY-TO-REHEAT																					
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 ♦	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp														Category	Type	
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C																
					CFX96 Touch™ (standard)				AriaMx™				Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	Typical colonies		All confirmatory tests	Final result	Agreement	Final result	Agreement							
	Cq	result			Cq	result		O&A (10 µL)	Palcam (10 µL)												
2023	337	Houmous citron confi	Houmous with candied lemon	-	No Cq	29,58	valid	-	No Cq	28,07	valid	-	-	-	-	NA	-	NA	1	a	
2023	1385	Piémontaise au jambon	Piemontaise with ham	+	20,98	34,21	valid	+	16,74	29,8	valid	+	H+	+	+	PA	+	PA	1	a	
2023	1386	Piémontaise au jambon	Piemontaise with ham	+	25,84	29,62	valid	+	21,12	27,23	valid	+	H+	+	+	PA	+	PA	1	a	
2023	1387	Piémontaise au jambon	Piemontaise with ham	+	27,39	29,15	valid	+	22,74	26,97	valid	+	H+	+	+	PA	+	PA	1	a	
2023	1873	Sandwich saumon salade pain de mie complet	Sandwich with salmon, salad, wholemeal bread	+	23,30	32,60	valid	+	18,7	27,34	valid	+	H+	+	+	PA	+	PA	1	a	
2023	1874	Sandwich jambon beurre pain de mie complet	Sandwich with ham, butter, wholemeal bread	+	No Cq	28,94	valid	-	No Cq	25,13	valid	-	st	-	-	ND	-	ND	1	a	
2023	1875	Club sandwich poulet rôti mayonnaise avec farine complète	Sandwich with roasted chicken meat, mayonnaise, wholemeal bread	+	18,62	37,81	valid	+	14,76	28,19	valid	+	H-	+	+	PA	+	PA	1	a	
2023	1877	Mini farfalles au thon tomate ail et ciboulette	Pasta salad with tuna, tomatoes and garlic	-	38,53/ 38,94/ 36,96	30,52/ 30,09/ 30,46	valid/ valid/ valid	+/+	32,16/ 33,81/ 35,17	25,81/ 26,56/ 25,95	valid/ valid/ valid	+/+	H-d/ (RLMx5:-)	-	-	-	PPNA	-	PPNA	1	a
2023	1878	Salade fusillu et jambon cuit comté tomates cerises et vinaigre balsamique	Pasta salad with cooked ham, tomatoes	-	37,44/ 39,69/ 38,21	29,41/ 30,83/ 30,82	valid/ valid/ valid	+/+	34,31/ 34,40/ 28,13	25,62/ 27,63/ 30,07	valid/ valid/ valid	+/+	- (RLMx5:-)	-	-	-	PPNA	-	PPNA	1	a
2023	2151	Apéritif olives, feta, tomates séchées, origan	Olives with cheese and tomatoes	+	25,11	29,59	valid	+	21,04	26,3	valid	+	H+	-	+	+	PA	+	PA	1	a
2023	2152	Mini roulé coppa, fromage de vache et ricotta	RTE ham with cheese	+	22,55	33,54	valid	+	18,69	28,2	valid	+	H+	+	+	+	PA	+	PA	1	a
2023	2153	Petits poivrons farcis, fromage de vache et ricotta	RTE pepper with cheese	-	27,20	29,06	valid	+	22,92	26,17	valid	+	H+	-	+	+	PD	+	PD	1	a
2023	2154	Salade jambon sec, chèvre et sauce vinaigrette	Salad with ham, cheese and sauce	+	24,64	29,45	valid	+	20,83	26,13	valid	+	H+	+	+	+	PA	+	PA	1	a
2023	2156	Sandwich thon crudités avec pain de mie complet	Salad with tuna, vegetables, wholemeal bread	+	28,63	29,33	valid	+	24,76	26,89	valid	+	H+	-	+	+	PA	+	PA	1	a
2023	2157	Sandwich poulet, crudités, baguette viennoise	Sandwich with chicken meat and vegetables	-	24,18	30,14	valid	+	20,29	26,98	valid	+	H+	+	+	+	PD	+	PD	1	a
2023	2158	Wrap poulet rôti façon fajitas sauce salsa	Wrap sandwich with sauce	+	36,24	29,03	valid	+	31,37	26,8	valid	+	H+	-	+	+	PA	+	PA	1	a

COMPOSITE FOODS / READY-TO-EAT AND READY-TO-REHEAT																					
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 <sup>♦</sup>	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp														Category	Type	
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C																
					CFX96 Touch™ (standard)				AriaMx™				Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	Typical colonies		All confirmatory tests	Final result	Agreement	Final result			Agreement
Cq	result	Cq	result	O&A (10 µL)		Palcam (10 µL)															
2023	325	Paillasson de légumes	RTRH food with vegetables	+	No Cq	29,61	valid	-	No Cq	27,49	valid	-	-	-	-	ND	-	ND	1	b	
2023	336	Galette de soja à la provençale	Soya galette with tomatoes and aromatic herbs	-	No Cq	30,92	valid	-	No Cq	26,58	valid	-	st	st	-	-	NA	-	NA	1	b
2023	580	Paillasson légumes et fromage	RTRH food with vegetables and cheese	+	No Cq	29,84	valid	-	40,81	25,31	valid	-	-	-	-	ND	-	ND	1	b	
2023	1035	Samoussa poulet	Chicken samoussa	+	32,54	29,42	valid	+	28,2	26,73	valid	+	H-	+	+	PA	+	PA	1	b	
2023	1342	Ecrasé portionnable thym seigle	RTRH food with potatoes, thyme, rye	+	No Cq	29,84	valid	-	No Cq	25,41	valid	-	-	-	-	ND	-	ND	1	b	
2023	1346	Epinaud haché à la crème	Sliced spinach with cream	+	23,89	31,47	valid	+	19,26	25,99	valid	+	H+	+	+	PA	+	PA	1	b	
2023	1481	Palets de courgettes avec fromage	Zucchini cake with cheese	+	No Cq	28,96	valid	-	No Cq	25,79	valid	-	-	-	-	ND	-	ND	1	b	
2023	1675	Feuilleté au jambon et fromage	RTRH food with ham and cheese	-	No Cq/ No Cq/ No Cq	30,36/ 30,05/ 29,96	valid/ valid/ valid	-/-	No Cq/ No Cq/ No Cq	27,87/ 24,98/ 24,95	valid/ valid/ valid	-/-	H+	-	+	-	NA	-	NA	1	b
2023	1854	Effeillé de pomme de terre, oignons rouges tomates séchées cuit surgelé	Cooked and frozen RTRH food with potatoes, onions, tomatoes	-	19,76	36,93	valid	+	16,12	29,49	valid	+	H+	+	+	+	PD	+	PD	1	b
2023	1916	Pizza 4 fromages	Pizza, 4 cheeses	+	No Cq	29,94	valid	-	No Cq	26,91	valid	-	-	-	-	ND	-	ND	1	b	
2023	1917	Pizza jambon fromage	Pizza with ham and cheese	+	36,35	29,99	valid	+	30,74	27,53	valid	+	H+	-	+	+	PA	+	PA	1	b
2023	1918	Quiche aux trois fromages (emmental, reblochon, chèvre)	Cheese pie	+	24,33	28,55	valid	+	18,97	25,82	valid	+	H-	+	+	PA	+	PA	1	b	
2023	1919	Couscous à la marocaine poulet et merguez	Couscous	+	No Cq	27,96	valid	-	No Cq	25,74	valid	-	st	st	-	-	ND	-	ND	1	b
2023	1920	Coucou royal aux 3 viandes	Couscous with 3 meats	-	20,82	33,14	valid	+	16,51	27,89	valid	+	H+/H-	+	+	+	PD	+	PD	1	b
2023	586	Croissant	Croissant	-	No Cq	32,84	valid	-	No Cq	28,85	valid	-	-	-	-	NA	-	NA	1	c	
2023	939	Flan à la part	Pastry flan	+	23,73	31,25	valid	+	19,50	25,34	valid	+	H-	+	+	+	PA	+	PA	1	c
2023	940	Flan pâtissier	Pastry flan	+	22,48	32,06	valid	+	18,30	25,42	valid	+	H-	+	+	+	PA	+	PA	1	c
2023	942	Tortilla espagnole aux pommes de terre	Omelette (with potatoes)	-	19,41	39,50	Invalid	+	15,07	29,13	valid	+	H+	+	+	+	PD	+	PD	1	c
2023	943	Coupe bavaroise aux fraises	Pastry with strawberries	-	24,05	32,83	valid	+	19,51	25,72	valid	+	H-	+	+	+	PD	+	PD	1	c
2023	944	Paris Brest	Pastry with custard	+	25,48	30,57	valid	+	21,54	25,39	valid	+	H-	+	+	+	PA	+	PA	1	c
2023	945	Eclair vanille	Pastry with custard (vanilla)	+	22,11	32,35	valid	+	17,91	25,44	valid	+	H-	+	+	+	PA	+	PA	1	c
2023	1853	Pain aux raisins	Raisin bread	+	39,45	30,52	valid	+	34,51	26,73	valid	+	H+dni/H+	-	+	+	PA	+	PA	1	c
2023	1880	Flan pâtissier	Pastry flan	+	18,28	39,08	Invalid	+	14,47	28,51	Invalid	+	H+	+	+	+	PA	+	PA	1	c
2023	1881	Choux chantilly	Pastry with Chantilly	+	20,60	38,24	valid	+	16,36	28,39	Invalid	+	H+	+	+	+	PA	+	PA	1	c



COMPOSITE FOODS / READY-TO-EAT AND READY-TO-REHEAT																						
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				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																	
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C								Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C				
					CFX96 Touch™ (standard)			AriaMx™			Typical colonies		All confirmatory tests	Final result		Final result						
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Final result	Agreement	Final result		Agreement								
2023	1882	Choux à la crème	Pastry with cream	-	27,12	29,02	valid	+	22,2	24,93	valid	+	H+	+	+	+	+	PD	+	PD	1	c
2023	1883	Tarte Tropicaine	Pastry with cream	+	19,37	39,01	Invalid	+	15,77	27,29	valid	+	H+	+	+	+	+	PA	+	PA	1	c
2023	1884	Tortilla espagnole avec pommes de terre	Omelette with potatoes	-	30,10/ 30,40/ 29,76	29,12/ 30,00/ 29,65	valid/ valid/ valid	+/+	25,1/ No Cq/ No Cq	25,16/ 24,91/ 24,83	valid/ valid/ valid	+/-	- (RLMx5:-)	-	-	-	-	PPNA	-	PPNA	1	c
2023	2250	Flan aux oeufs cuit et doré au four	Pastry flan	+	29,69	29,18	valid	+	25,71	25,72	valid	+	H+	-	+	+	+	PA	+	PA	1	c
2023	2251	Eclair café	Pastry, with cream flavour coffee	+	39,05/ No Cq/ No Cq	29,80/ 29,55/ 29,11	valid/ valid/ valid	+/-	No Cq	26,16	valid	-	-	-	-	-	-	PPND	-	ND	1	c
2023	2252	Fraisier	Pastry with cream and strawberry	+	31,65	29,24	valid	+	27,49	26,13	valid	+	H+	-	+	+	+	PA	+	PA	1	c
2023	2253	Choux Chantilly	Pastry with Chantilly	+	28,45	29,55	valid	+	24,55	26,59	valid	+	H+	+	+	+	+	PA	+	PA	1	c
2023	2627	Barre chocolatée avec biscuit caramel	Confectionary with chocolate and caramel	-	No Cq/ No Cq*/ No Cq**	No Cq/ 28,38*/ 28,68**	Invalid/ valid*/ valid**	Q/-/-**	No Cq/ No Cq*/ No Cq**	No Cq/ 27,00*/ 25,52**	Invalid/ valid*/ valid**	Q/-/-**	-	-	-	-	-	NA	-	NA	1	c

MEAT PRODUCTS																					
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				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C								Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
					CFX96 Touch™ (standard)			AriaMx™			Typical colonies		All confirmatory tests	Final result	Agreement	Final result	Agreement				
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)												
2023	276	Viande de poulet crue	Raw chicken meat	+	22,10	35,03	valid	+	17,83	29,41	valid	+	H+	+	+	+	PA	+	PA	2	a
2023	277	Steak haché de volaille	Raw ground poultry	+	29,88	30,64	valid	+	25,12	27,78	valid	+	H+/H-	+	+	+	PA	+	PA	2	a
2023	280	Cuisse de poulet	Chicken leg meat	+	27,05	30,68	valid	+	22,79	27,89	valid	+	H+/H-	+	+	+	PA	+	PA	2	a
2023	282	Viande rouge avec peau	Raw red meat	+	No Cq	31,19	valid	-	No Cq	28,37	valid	-	st	-	-	-	ND	-	ND	2	a
2023	285	Cuisse de coq	Raw rooster meat	-	No Cq	31,50	valid	-	No Cq	26,86	valid	-	st	st	-	-	NA	-	NA	2	a
2023	286	Steak haché de volaille	Raw ground poultry	+	24,09	31,79	valid	+	19,59	27,24	valid	+	H+ ( <i>L. monocytogenes</i> )/H-	+	+	+	PA	+	PA	2	a
2023	288	Steak haché de volaille	Raw ground poultry	+	26,19	30,42	valid	+	21,63	27,29	valid	+	H+/H-	+	+	+	PA	+	PA	2	a
2023	295	Viande crue de dinde	Raw poultry meat	+	No Cq/ No Cq/ No Cq	30,60/ 30,25/ 30,46	valid/ valid/ valid	-/-	No Cq/ 36,57/ (41,40)	30,1/ 27,44/ 27,85	valid/ valid/ valid	-/+	H-	+(2)	+	-	ND	-	ND	2	a
2023	328	Steak de poulet	Chicken meat	-	No Cq	29,44	valid	-	No Cq	27,8	valid	-	-	-	-	-	NA	-	NA	2	a
2023	331	Cuisse de dinde	Poultry leg meat	+	29,32	33,90	valid	+	25,75	31,27	valid	+	H-	+	+	+	PA	+	PA	2	a
2023	332	Steak haché de volaille	Raw ground poultry meat	+	30,73	31,60	valid	+	27,59	31,07	valid	+	H+/H-	+	+	+	PA	+	PA	2	a
2023	431	Steak haché de bœuf	Raw ground beef meat	+	31,74	30,95	valid	+	27,18	27,78	valid	+	H+/H-	+	+	+	PA	+	PA	2	a
2023	434	Steak haché de volaille	Raw ground poultry meat	-	32,44	31,34	valid	+	27,43	27,99	valid	+	H+/H-	+	+	+	PD	+	PD	2	a
2023	582	Haut de cuisse de dinde	Raw poultry meat	+	34,64	34,39	valid	+	28,91	30,01	valid	+	H-	+	+	+	PA	+	PA	2	a
2023	583	Sauté de dinde	Raw poultry meat	+	32,03	34,12	valid	+	26,86	30,14	valid	+	H-	+	+	+	PA	+	PA	2	a
2023	834	Poulet au citron cru	Raw chicken meat	-	34,48	31,50	valid	+	31,18	28	valid	+	H-	+	+	+	PD	+	PD	2	a
2023	2262	Viande bovine rumsteak à griller surgelée	Raw beef meat	+	28,81	29,16	valid	+	24,92	25,87	valid	+	H-	+	+	+	PA	+	PA	2	a
2023	2267	Filet de canard façon tournedos	Raw duck meat	+	34,21	29,81	valid	+	29,75	26,15	valid	+	H+	-	+	+	PA	+	PA	2	a
2023	2269	Filet de dinde	Raw poultry meat	-	29,49	32,45	valid	+	25,95	28,6	valid	+	H+	+	+	+	PD	+	PD	2	a
2023	2727	Escalope de veau à griller	Raw veal meat	-	29,29	30,13	valid	+	24,58	25,57	valid	+	H+	+	+	+	PD	+	PD	2	a
2023	278	Ailes de poulet roti	Roasted chicken wings	+	No Cq	28,49	valid	-	No Cq	26,15	valid	-	st	-	-	-	ND	-	ND	2	b
2023	284	Porc au curry	Cooked pork meat with curry	+	22,25	32,45	valid	+	18,01	26,69	valid	+	H+	+	+	+	PA	+	PA	2	b
2023	291	Poulet façon fajitas	Cooked chicken meat (fajitas)	-	34,79	28,44	valid	+	30,26	25,49	valid	+	H+	-	+	+	PD	+	PD	2	b
2023	294	Porc au curry	Cooked pork meat with curry	+	18,40	No Cq	Invalid	+	14,48	31,26	Invalid	+	H+	+	+	+	PA	+	PA	2	b
2023	326	Escalope poulet pané	Breaded chicken cutlet	+	25,04	30,14	valid	+	21,5	28,49	valid	+	H+	+	+	+	PA	+	PA	2	b
2023	1905	Bœuf bourguignon	Cooked beef meat	-	23,47	29,04	valid	+	18,84	26,85	valid	+	H+	+	+	+	PD	+	PD	2	b
2023	1906	Blanquette de veau	Cooked veal meat	-	16,27	No Cq	Invalid	+	12,44	No Cq	Invalid	+	H+	+	+	+	PD	+	PD	2	b
2023	1907	Lapin chasseur	Cooked rabbit meat	+	No Cq	27,77	valid	-	No Cq	25,9	valid	-	st	st	-	-	ND	-	ND	2	b
2023	1908	Poulet basquaise au piment du Pays basque	Cooked chicken meat	+	No Cq	28,07	valid	-	No Cq	25,91	valid	-	st	st	-	-	ND	-	ND	2	b
2023	1909	Roti de porc, RTRH	Cooked pork meat	+	15,91	No Cq	Invalid	+	12,31	33,23	Invalid	+	H+	+	+	+	PA	+	PA	2	b
2023	2820	Bœuf sauce au poivre	RTRH beef meat with pepper	-	No Cq	29,25	valid	-	No Cq	25,47	valid	-	H-d(-)	-	-	-	NA	-	NA	2	b

♦ Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.

203/220

October 30, 2023



MEAT PRODUCTS																					
Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 ♦	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp														Category	Type	
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C																
					CFX96 Touch™ (standard)				AriaMx™				Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	Typical colonies		All confirmatory tests	Final result	Agreement	Final result	Agreement							
	Cq	result			Cq	result		O&A (10 µL)	Palcam (10 µL)												
2023	287	Boudin noir	Blood sausage	+	17,46	No Cq	Invalid	+	13,61	33,79	Invalid	+	H+/H-	+	+	+	PA	+	PA	2	c
2023	290	Saucisson aux cèpes	Sausage with mushrooms	-	No Cq	28,69	valid	-	No Cq	26,01	valid	-	-	-	-	-	NA	-	NA	2	c
2023	292	Saucisse knacki	Knack sausage	-	35,97	28,60	valid	+	31,98	25,9	valid	+	H-	-	+	+	PD	+	PD	2	c
2023	584	Chorizo fumé	Smoked chorizo	+	26,07	30,29	valid	+	21,27	26,02	valid	+	H+/H-	+	+	+	PA	+	PA	2	c
2023	1034	Saucisse Ouessant fumée à la motte	Smoked sausage	+	32,73	29,33	valid	+	28,37	26,51	valid	+	H+/H-	+	+	+	PA	+	PA	2	c
2023	1048	Jambon cuit supérieur en dès	Cooked and sliced ham	+	27,38	28,68	valid	+	22,83	25,93	valid	+	H+	+	+	+	PA	+	PA	2	c
2023	1189	Merguez	Merguez	+	22,25	34,57	valid	+	17,85	29,77	valid	+	H-	+	+	+	PA	+	PA	2	c
2023	1191	Chorizo fumé pur porc	Smoked chorizo	+	No Cq	30,03	valid	-	No Cq	26,72	valid	-	-	-	-	-	ND	-	ND	2	c
2023	1478	Pâté de campagne maison	Farmer's pâté	+	19,19	38,88	Invalid	+	14,88	30,07	Invalid	+	H+	+	+	+	PA	+	PA	2	c
2023	1484	Saucisse de Strasbourg supérieure	Sausage (Strasbourg)	+	23,45	29,97	valid	+	18,85	26,41	valid	+	H+	+	+	+	PA	+	PA	2	c
2023	1657	Merguez piquante	Spicy merguez	+	37,00	30,17	valid	+	31,03	26,51	valid	+	H-d ( <i>L. innocua</i> )	+ ( <i>L. monocytogenes</i> )	+	+	PA	+	PA	2	c
2023	1658	Chorizo fumé	Smoked chorizo	-	30,72	29,87	valid	+	25,37	26,03	valid	+	H-	-	+	+	PD	+	PD	2	c
2023	1659	Merguez tunisienne	Tunisian merguez	+	31,98	29,99	valid	+	26,77	25,89	valid	+	H-	+	+	+	PA	+	PA	2	c
2023	1660	Saucisse d'agneau	Lamb sausage	-	35,02	31,00	valid	+	29,02	26,51	valid	+	H+	-	+	+	PD	+	PD	2	c
2023	1673	Chorizo fumé pur porc	Smoked chorizo	+	27,88	29,97	valid	+	22,73	25,98	valid	+	H+/H-	+	+	+	PA	+	PA	2	c
2023	1676	Merguez	Merguez	+	31,77	30,01	valid	+	26,5	25,98	valid	+	H+( <i>L. monocytogenes</i> )/H-	+	+	+	PA	+	PA	2	c

MILK AND DAIRY PRODUCTS																					
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				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C								Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
					CFX96 Touch™ (standard)			AriaMx™			Typical colonies		All confirmatory tests	Final result		Final result					
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Final result	Agreement	Final result		Agreement							
2023	429	Fromage pâte persillée au lait cru de brebis	Raw ewe milk cheese	-	39,54/39,92/No Cq	30,53/30,01/30,57	valid/valid/valid	+/-	34,02/36,35/35,67	27,82/27,13/26,57	valid/valid/valid	+/+	st (x5)	st (x5)	-	-	PPNA	-	PPNA	3	a
2023	435	Fromage pâte persillée au lait cru de brebis	Raw ewe milk cheese	-	No Cq/40,68/40,03	29,40/29,71/29,74	valid/valid/valid	-/+	36,14/36,27/35,56	26,06/25,52/25,66	valid/valid/valid	+/+	st	st	-	-	NA	-	PPNA	3	a
2023	436	Fromage pâte persillée au lait cru de brebis	Raw ewe milk cheese	-	40,88/No Cq/No Cq	29,28/29,35/29,57	valid/valid/valid	+/-	No Cq/36,65/No Cq	26,05/26,74/26,10	valid/valid/valid	-/+	st (x5)	st (x5)	-	-	PPNA	-	NA	3	a
2023	838	Camembert au lait cru	Raw cow milk cheese	+	38,94	30,31	valid	+	33,67	26,83	valid	+	H-	+	+	+	PA	+	PA	3	a
2023	839	Camembert au lait cru	Raw cow milk cheese	-	39,17	30,62	valid	+	36,08	26,94	valid	+	H-	+	+	+	PD	+	PD	3	a
2023	843	Munster au lait cru de vache	Raw cow milk cheese	-	34,97	33,25	valid	+	29,9	28,18	valid	+	H-	+	+	+	PD	+	PD	3	a
2023	850	Fondant de brebis au lait cru	Raw ewe milk cheese	+	31,91	30,98	valid	+	27,92	26,71	valid	+	H-	+	+	+	PA	+	PA	3	a
2023	2160	Fromage au lait cru de Brebis Ossau iraty	Raw ewe milk cheese	+	23,98	29,64	valid	+	19,97	26,44	valid	+	H+	+	+	+	PA	+	PA	3	a
2023	2161	Roquefort au lait cru de chèvre	Raw goat milk cheese	+	No Cq	29,54	valid	-	No Cq	26,94	valid	-	H-d/-	-	-	-	ND	-	ND	3	a
2023	2162	Morbier au lait cru de vache	Raw cow milk cheese	+	33,40	34,19	valid	+	28,66	30,81	valid	+	H+	+	+	+	PA	+	PA	3	a
2023	2163	Bethmale au lait cru de vache	Raw cow milk cheese	+	No Cq	29,86	valid	-	No Cq	27,95	valid	-	-	-	-	-	ND	-	ND	3	a
2023	2164	Rocamadour au lait cru de chèvre	Raw goat milk cheese	+	30,63	29,66	valid	+	26,57	26,87	valid	+	-	+(1)	+	+	PA	+	PA	3	a
2023	2165	Chavignol au lait cru de chèvre	Raw goat milk cheese	+	31,45	29,96	valid	+	27,74	28,05	valid	+	H+	+	+	+	PA	+	PA	3	a
2023	2388	Brie de Meaux au lait cru	Raw cow milk cheese	+	25,40	31,10	valid	+	21,88	35,65	valid	+	H+	+	+	+	PA	+	PA	3	a
2023	2389	Tomme de chèvre au lait cru	Raw goat milk cheese	+	25,18	27,47	valid	+	21,5	30,31	valid	+	H+	+	+	+	PA	+	PA	3	a
2023	2390	Tomme de brebis au lait cru	Raw ewe milk cheese	+	No Cq	27,57	valid	-	No Cq	29,54	valid	-	st	-	-	-	ND	-	ND	3	a
2023	2391	Emmental grand cru au lait cru de vache	Raw cow milk cheese	+	28,84	30,30	valid	+	26,23	33,83	valid	+	H+	st	+	+	PA	+	PA	3	a
2023	2611	Emmental au lait cru	Raw milk cheese	-	25,94	No Cq	Invalid	+	21,25	31,95	valid	+	H+	-	+	+	PD	+	PD	3	a
2023	444	Lait cru de brebis	Raw ewe milk	+	19,52	37,29	valid	+	14,97	29,52	Invalid	+	H+	+	+	+	PA	+	PA	3	b
2023	1855	Lait de brebis	Ewe milk	+	19,47	36,12	valid	+	16,02	28,83	valid	+	H+	+	+	+	PA	+	PA	3	b
2023	1856	Lait de brebis	Ewe milk	+	18,85	37,19	valid	+	15,5	30,6	Invalid	+	H+	+	+	+	PA	+	PA	3	b
2023	1857	Lait de brebis	Ewe milk	+	21,29	36,42	valid	+	17,8	31,94	Invalid	+	H+	+	+	+	PA	+	PA	3	b
2023	2166	Lait cru fermenté de vache	Raw milk cheese	+	No Cq	30,51	valid	-	No Cq	27,51	valid	-	-	-	-	-	ND	-	ND	3	b

♦ Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.

205/220

October 30, 2023

## MILK AND DAIRY PRODUCTS

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 ♦	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp														Category	Type	
					18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C																
					CFX96 Touch™ (standard)				AriaMx™				Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	Typical colonies		All confirmatory tests	Final result	Agreement	Final result	Agreement							
	Cq	result			Cq	result		O&A (10 µL)	Palcam (10 µL)												
2023	2167	Lait cru de vache jersiaise	Raw milk cheese	-	33,51	29,12	valid	+	29,76	26,76	valid	+	H+	-	+	+	PD	+	PD	3	b
2023	2170	Crème crue fermière au lait cru de vache	Cream with raw cow milk	+	No Cq/ No Cq/ No Cq	31,70/ 32,43/ 32,12	valid/ valid/ valid	-/-	No Cq/ No Cq/ No Cq	29,81/ 28,41/ 28,53	valid/ valid/ valid	-/-	H+d(2) ( <i>L. ivanovii</i> )	-	+	-	ND	-	ND	3	b
2023	2171	Crème crue fermière au lait cru de vache	Cream with raw cow milk	+	No Cq/ No Cq/ No Cq	31,47/ 30,41/ 30,59	valid/ valid/ valid	-/-	No Cq/ No Cq/ No Cq	29,63/ 27,45/ 28,21	valid/ valid/ valid	-/-	H+d(3) ( <i>L. monocytogenes</i> )	-	+	-	ND	-	ND	3	b
2023	2392	Beurre cru de vache, baratte, demi-sel	Raw butter with salt	+	26,19	28,23	valid	+	21,77	31,91	valid	+	H+	-	+	+	PA	+	PA	3	b
2023	2393	Beurre de baratte au lait cru demi-sel	Butter with raw milk and salt	-	28,94	18,97	valid	+	24,74	No Cq	Invalid	+	H+	+	+	+	PD	+	PD	3	b
2023	2397	Crème crue au lait cru de vache	Raw cream with raw cow milk	-	36,40	28,51	valid	+	33,68	30,23	valid	+	H+	-	+	+	PD	+	PD	3	b
2023	2610	Beurre doux à la crème maturé non pasteurisé	Butter with raw milk	+	22,12	37,64	valid	+	17,79	No Cq	Invalid	+	H+	+	+	+	PA	+	PA	3	b
2023	932	Petit basque au lait de brebis pasteurisé (36%MG)	Pasteurized ewe milk cheese (36% FL)	-	25,82	30,17	valid	+	21,42	25,23	valid	+	H+	-	+	+	PD	+	PD	3	c
2023	933	Tomme des Pyrénées au lait de vache pasteurisé (28%MG)	Pasteurized cow milk cheese (28% FL)	+	26,80	30,17	valid	+	22,38	25,33	valid	+	H+	+	+	+	PA	+	PA	3	c
2023	934	Bûche de chèvre au lait pasteurisé (23% MG)	Pasteurized goat milk cheese (23% FL)	-	32,49	29,94	valid	+	27,61	25,68	valid	+	H-	+	+	+	PD	+	PD	3	c
2023	935	Riz au lait saveur vanille	Rice pudding (vanilla)	+	21,26	37,81	valid	+	16,81	26,91	valid	+	H+	+	+	+	PA	+	PA	3	c
2023	936	Semoule au lait saveur vanille	Milk semolina (vanilla)	+	21,48	35,74	valid	+	17,09	27,07	valid	+	H-	+	+	+	PA	+	PA	3	c
2023	937	Crème fraîche légère épaisse pasteurisée	Pasteurized fresh cream (light)	+	No Cq	29,95	valid	-	No Cq	25,41	valid	-	-	-	-	-	ND	-	ND	3	c
2023	938	Crème fraîche entière gastronomique pasteurisée	Pasteurized fresh cream (whole)	+	21,17	34,74	valid	+	18,92	25,98	valid	+	H-	+	+	+	PA	+	PA	3	c
2023	1910	Crème fraîche épaisse légère pasteurisée	Pasteurized cream, thick and light	+	22,69	28,67	valid	+	18,72	25,68	valid	+	H+	-	+	+	PA	+	PA	3	c
2023	1911	Crème fraîche épaisse pasteurisée	Pasteurized cream, thick	+	No Cq	27,87	valid	-	No Cq	25,88	valid	-	-	-	-	-	ND	-	ND	3	c
2023	1912	Riz au lait vanille	Rice pudding (vanilla)	-	17,04	40,51	Invalid	+	13,43	33,62	Invalid	+	H-ni/H-	+	+	+	PD	+	PD	3	c
2023	1913	Panna cotta et son coulis mangue passion	Panna cotta with fruit sauce	+	22,06	36,23	valid	+	18,13	27,71	valid	+	H+	+	+	+	PA	+	PA	3	c
2023	1914	Panna cotta et son coulis caramel au lait	Panna cotta with caramel	+	No Cq	30,04	valid	-	No Cq	28,38	valid	-	st	-	-	-	ND	-	ND	3	c
2023	1915	Lait demi écrémé frais pasteurisé	Pasteurized fresh milk, semi-skimmed milk	+	20,64	34,97	valid	+	16,22	29,41	valid	+	H+	+	+	+	PA	+	PA	3	c
2023	2254	Semoule au lait et à la vanille	Semolina with milk and vanilla	+	24,89	29,72	valid	+	21,09	25,83	valid	+	H+	+	+	+	PA	+	PA	3	c

## MILK AND DAIRY PRODUCTS

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 ♦	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp														Category	Type	
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C								Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies		All confirmatory tests	Final result		Final result			
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Final result	Agreement	Final result	Agreement								
2023	2255	Mozzarella mini	Pasteurised cheese, mozzarella	+	25,43	29,58	valid	+	21,3	25,44	valid	+	H+	+	+	+	PA	+	PA	3	c
2023	2256	Mozzarella	Pasteurised cheese, mozzarella	+	24,96	29,22	valid	+	20,8	25,32	valid	+	H+	+	+	+	PA	+	PA	3	c
2023	2257	Ricotta	Pasteurised cheese, ricotta	+	35,78	30,21	valid	+	30,65	26,56	valid	+	H+	-	+	+	PA	+	PA	3	c
2023	2637	Glace cookie dough	Ice cream, flavour cookie	-	No Cq	32,33	valid	-	No Cq	28,28	valid	-	-	-	-	-	NA	-	NA	3	c
2023	2638	Glace chocolat brownies	Ice cream, flavour chocolate brownie	-	No Cq/ No Cq*/ No Cq**	No Cq/ 38,44*/ 27,64**	Invalid/ Invalid*/ valid**	Q/Q*/-/**	No Cq/ No Cq*/ No Cq**	No Cq/ 41,66*/ 25,63**	Invalid/ Invalid*/ valid**	Q/Q*/-/**	-	-	-	-	NA	-	NA	3	c

## VEGETABLES

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 ♦	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp															Category	Type
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C																
					CFX96 Touch™ (standard)				AriaMx™				Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	Typical colonies		All confirmatory tests	Final result	Agreement	Final result	Agreement		
Cq	result	Cq	result	O&A (10 µL)		Palcam (10 µL)															
2023	339	Petits pois	Green peas	+	19,71	38,02	valid	+	16,54	33,61	valid	+	H+/H-	+	+	+	PA	+	PA	4	a
2023	343	Brocolis	Broccoli	+	No Cq	27,88	valid	-	No Cq	27,61	valid	-	-	-	-	-	ND	-	ND	4	a
2023	1030	Petits pois bio	Organic peas	+	21,53	33,78	valid	+	16,85	27,74	valid	+	H+ni(RLM+)/H-	+	+	+	PA	+	PA	4	a
2023	1172	Graines germées Alfalfa bio	Organic sprouts, Alfalfa	+	25,47	30,48	valid	+	20,15	25,85	valid	+	H+	+	+	+	PA	+	PA	4	a
2023	1173	Mélange graines germées (Alfalfa, radis, fenouil)	Sprouts (alfalfa, radish, fennel)	+	28,24	29,68	valid	+	22,95	25,99	valid	+	H-	+	+	+	PA	+	PA	4	a
2023	1174	Jeunes pousses mélange mesclun	Baby leaves (mix)	+	20,57	No Cq	Invalid	+	15,98	No Cq	Invalid	+	H+	+	+	+	PA	+	PA	4	a
2023	1175	Jeunes pousses mâche	Baby leaves (lamb's lettuce)	-	25,73	30,93	valid	+	20,32	26,37	valid	+	H-	-	+	+	PD	+	PD	4	a
2023	1176	Epinards frais	Fresh spinach	+	22,07	32,74	valid	+	17,54	27,03	valid	+	H-	+	+	+	PA	+	PA	4	a
2023	1177	Epinards frais à cuire	Fresh spinach	+	21,26	34,63	valid	+	16,76	29,95	valid	+	H-	+	+	+	PA	+	PA	4	a
2023	1372	Graines germées Alfalfa, radis, fenouil bio	Sprouts (alfalfa, radish, fennel)	+	31,95	29,26	valid	+	26,7	26,17	valid	+	H+	+	+	+	PA	+	PA	4	a
2023	1373	Graine germées Alfalfa bio	Sprouts (organic alfalfa)	+	26,58	28,94	valid	+	21,88	26,03	valid	+	H+	+	+	+	PA	+	PA	4	a
2023	1374	Brocolis	Broccoli	-	No Cq	30,60	valid	-	No Cq	26,19	valid	-	-	-	-	-	NA	-	NA	4	a
2023	1375	Céleri branche	Celery stalk	-	36,20	29,08	valid	+	30,94	26,14	valid	+	H+d	-	+	+	PD	+	PD	4	a
2023	1376	Navet violet	Purple turnip	+	21,64	32,80	valid	+	17,35	27,92	valid	+	H+	+	+	+	PA	+	PA	4	a
2023	1377	Endive	Endive	-	37,33/ 38,20/ 38,66	29,20/ 30,49/ 30,34	valid/ valid/ valid	+/+	33,47/ 31,88/ 32,52	26,61/ 25,75/ 24,98	valid/ valid/ valid	+/+	H-	-	+	+	PD	+	PD	4	a
2023	1378	Chou	Cabbage	+	No Cq	29,16	valid	-	No Cq	25,16	valid	-	-	-	-	-	ND	-	ND	4	a
2023	1477	Poivrons rouges	Red pepper	+	27,72	29,04	valid	+	22,61	26,15	valid	+	H+	+	+	+	PA	+	PA	4	a
2023	340	Poêlée parisienne bio	Organic vegetables mix	-	26,92	28,51	valid	+	23,49	27,61	valid	+	H-	-	+	+	PD	+	PD	4	b
2023	576	Aubergine grillée	Grilled eggplant	+	34,34	29,85	valid	+	28,53	25,61	valid	+	H+	-	+	+	PA	+	PA	4	b
2023	585	Poêlée du soleil tomate basilic	Vegetables mix (with tomato and basil)	+	No Cq	29,79	valid	-	No Cq	25,74	valid	-	st	-	-	-	ND	-	ND	4	b
2023	840	Légumes vapeur pois épinards	Steamed cooked vegetables (peas and spinach)	+	24,05	30,47	valid	+	20,1	25,73	valid	+	H+/H-	+	+	+	PA	+	PA	4	b
2023	1033	Palets poireaux carottes brocolis	Vegetables cake (leeks, carrots, broccoli)	+	No Cq	29,22	valid	-	No Cq	25,9	valid	-	-	-	-	-	ND	-	ND	4	b
2023	1037	Palets de courgettes et petits légumes	Zucchini cake with other vegetables	-	30,88	29,64	valid	+	26,3	26,85	valid	+	H+	-	+	+	PD	+	PD	4	b
2023	1180	Macédoine de légumes	Vegetable macédoine	+	26,51	30,25	valid	+	21,47	26,3	valid	+	H+	+	+	+	PA	+	PA	4	b
2023	1181	Macédoine de légumes	Vegetable macédoine	+	31,85	30,25	valid	+	25,56	26,32	valid	+	H+	-	+	+	PA	+	PA	4	b
2023	1333	Brocolis en fleurette	Sliced and cooked broccoli	-	23,36	30,69	valid	+	18,87	25,62	valid	+	H-	+	+	+	PD	+	PD	4	b

♦ Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.

208/220

October 30, 2023



## VEGETABLES

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 ♦	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp														Category	Type	
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C								Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies		All confirmatory tests	Final result		Final result			
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Final result	Agreement	Final result	Agreement								
2023	1338	Mélange de légumes cuits	Cooked vegetables mix	+	17,95	40,25	Invalid	+	13,92	31,22	Invalid	+	H+/H-	+	+	+	PA	+	PA	4	b
2023	1339	Pomme de terre grenaille beurre sel	Cooked potatoes	-	No Cq	29,85	valid	-	No Cq	25,58	valid	-	-	-	-	-	NA	-	NA	4	b
2023	1381	Ratatouille	Ratatouille	+	18,93	39,77	Invalid	+	14,39	31,05	Invalid	+	H+	+	+	+	PA	+	PA	4	b
2023	1382	Cœur de laitue en sachet	Bagged lettuce	+	37,79	29,57	valid	+	32,45	26,95	valid	+	H+(8)	-	+	+	PA	+	PA	4	b
2023	1388	Macédoine de légumes	Vegetable macedoine	+	No Cq	29,36	valid	-	No Cq	26,68	valid	-	-	-	-	-	ND	-	ND	4	b
2023	1178	Houmous de poivrons	Bell pepper hummus	+	21,90	35,21	valid	+	17,45	30,78	valid	+	H+/H- (L. welshimeri)	+	+	+	PA	+	PA	4	c
2023	1179	Guacamole	Guacamole	+	24,78	41,81	Invalid	+	19,63	29,83	Invalid	+	H-	+	+	+	PA	+	PA	4	c
2023	1182	Choux fleur à croquer	Cauliflower ready to eat	+	22,41	32,63	valid	+	17,35	26,55	valid	+	H+	+	+	+	PA	+	PA	4	c
2023	1183	Baby carottes à croquer	Baby carrots ready to eat	-	24,35	30,21	valid	+	19,64	26,12	valid	+	H+	+	+	+	PD	+	PD	4	c
2023	1380	Tartare de légumes	Vegetable tartar	+	27,38	29,61	valid	+	22,35	26,42	valid	+	H+	+	+	+	PA	+	PA	4	c
2023	1383	Caviar d'aubergine	Eggplant caviar	+	20,12	38,14	valid	+	15,28	35,88	Invalid	+	H+	+	+	+	PA	+	PA	4	c
2023	1384	Caviar d'aubergine	Eggplant caviar	+	20,11	39,15	Invalid	+	15,27	34,06	Invalid	+	H+	+	+	+	PA	+	PA	4	c
2023	1389	Coleslaw	Coleslaw	+	24,59	30,07	valid	+	19,81	26,46	valid	+	H+	+	+	+	PA	+	PA	4	c
2023	1391	Tapenade d'olives noires	Tapenade of black olives	+	No Cq	30,47	valid	-	35,03/ No Cq/ 35,57	26,27/ 25,17/ 25,22	valid/ valid/ valid	+/-/+	st	st	-	-	ND	-	PPND	4	c
2023	1394	Tartinade d'artichaud	Artichoke RTE food	-	18,23	No Cq	Invalid	+	14,12	No Cq	Invalid	+	H-	+	+	+	PD	+	PD	4	c
2023	1395	Tartinade de poivrons confits	Pepper RTE food	+	26,19	33,06	valid	+	21,97	32,82	Invalid	+	H-	+	+	+	PA	+	PA	4	c
2023	1460	Salade boulgour, lentilles, potiron	Vegetables salad (bulgur, lentil, pumpkin)	+	25,42	30,05	valid	+	20,65	26,94	valid	+	H+	+	+	+	PA	+	PA	4	c
2023	1461	Salade lentilles, oignons	Vegetables salad (lentil, onions)	-	21,92	36,08	valid	+	17,46	30,1	Invalid	+	H+	+	+	+	PD	+	PD	4	c
2023	1463	Macédoine aux 5 légumes	Vegetables macedoine	+	19,38	37,31	valid	+	15,11	32,26	Invalid	+	H+	+	+	+	PA	+	PA	4	c
2023	1464	Tartinade houmous poivrons	Hummus and pepper RTE food	-	19,12	41,34	Invalid	+	14,43	32,56	Invalid	+	H+	+	+	+	PD	+	PD	4	c
2023	1465	Tartinade houmous	Hummus RTE food	+	18,32	No Cq	Invalid	+	14,2	40,77	Invalid	+	H+	+	+	+	PA	+	PA	4	c

## SEAFOOD AND FISHERY PRODUCTS

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 ♦	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp														Category	Type	
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C							Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C				
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	Typical colonies		All confirmatory tests	Final result	Agreement	Final result			Agreement
Cq	result	Cq	result	O&A (10 µL)		Palcam (10 µL)															
2023	427	Beaufilet de colin nature cru	Raw fish filet	+	24,46	30,08	valid	+	19,47	25,4	valid	+	H+	+	+	+	PA	+	PA	5	a
2023	437	Pavé de saumon Ecosse	Raw salmon filet (Scottish)	-	28,44	29,74	valid	+	23,56	26,61	valid	+	H+	+	+	+	PD	+	PD	5	a
2023	439	Dos de colin d'Alaska nature (cru)	Raw fish filet	+	19,84	34,87	valid	+	15,67	28,91	valid	+	H+	+	+	+	PA	+	PA	5	a
2023	589	Chair grattée de saumon	Raw salmon pulp	+	30,29	30,40	valid	+	24,88	26,24	valid	+	H+	+	+	+	PA	+	PA	5	a
2023	590	Dos de colin d'Alaska	Raw fish filet	+	20,04	36,66	valid	+	15,33	28,01	valid	+	H+	+	+	+	PA	+	PA	5	a
2023	591	Chair de saumon	Raw salmon pulp	+	No Cq	30,78	valid	-	No Cq	26,48	valid	-	st	-	-	-	ND	-	ND	5	a
2023	1328	Crevettes crues congelées	Frozen raw shrimp	-	No Cq	30,66	valid	-	No Cq	27,42	valid	-	-	-	-	-	NA	-	NA	5	a
2023	1329	Crevettes décortiquées	Raw peeled shrimp	+	28,92	29,56	valid	+	24,1	25,57	valid	+	H+/H-	+	+	+	PA	+	PA	5	a
2023	1330	Crevettes décortiquées	Raw peeled shrimp	+	29,51	29,84	valid	+	24,11	25,42	valid	+	H+/H-	+	+	+	PA	+	PA	5	a
2023	1671	Cocktail de fruits de mer (encornets, crevettes, moules)	Seafood cocktail	-	No Cq	29,51	valid	-	No Cq	26,09	valid	-	st	-	-	-	NA	-	NA	5	a
2023	2174	Noix de Saint Jacques	Scallop	+	23,91	34,44	valid	+	19,9	29,85	valid	+	H+/H-	+	+	+	PA	+	PA	5	a
2023	2176	Filet de Lieu noir	Fish filet	-	21,58	34,47	valid	+	18,02	28,36	valid	+	H-	+	+	+	PD	+	PD	5	a
2023	443	Saumon fumé d'atlantique	Smoked salmon filet	+	No Cq	30,12	valid	-	No Cq	27,31	valid	-	-	-	-	-	ND	-	ND	5	b
2023	1040	Truite fumée	Smoked trout filet	-	28,22	29,01	valid	+	23,83	27,29	valid	+	H+	-	+	+	PD	+	PD	5	b
2023	1044	Saumon fumé Ecosse	Smoked salmon filet (Scottish)	+	No Cq	30,52	valid	-	No Cq	27,68	valid	-	-	-	-	-	ND	-	ND	5	b
2023	1046	Saumon fumé bio	Organic smoked salmon filet	+	21,18	38,62	valid	+	16,76	29,68	Invalid	+	H-	+	+	+	PA	+	PA	5	b
2023	1187	Saumon fumé de Norvège	Smoked salmon (Norway)	+	23,48	32,24	valid	+	19,63	27,86	valid	+	H-	+	+	+	PA	+	PA	5	b
2023	1850	Truite fumée Bretagne	Smoked trout	+	17,40	No Cq	Invalid	+	13,57	32,02	Invalid	+	H-	+	+	+	PA	+	PA	5	b
2023	1851	Saumon fumé	Smoked salmon	+	20,41	34,58	valid	+	16,54	28,98	valid	+	H+	+	+	+	PA	+	PA	5	b
2023	1861	Truite fumée mini tranches	Smoked sliced trout	-	26,30	29,64	valid	+	22,33	26,77	valid	+	H-	+	+	+	PD	+	PD	5	b
2023	1862	Filet de harengs fumé doux	Smoked herring	+	No Cq	29,49	valid	-	No Cq	26,3	valid	-	-	-	-	-	ND	-	ND	5	b
2023	2178	Truite fumée en mini-tranches	Smoked sliced trout	+	26,08	33,62	valid	+	22,29	30,72	valid	+	H-	-	+	+	PA	+	PA	5	b
2023	2408	Truite fumée	Smoked trout	+	16,88	36,47	valid	+	14,03	No Cq	Invalid	+	H-	+	+	+	PA	+	PA	5	b
2023	2410	Saumon fumé Ecosse Label rouge	Smoked salmon	+	15,13	No Cq	valid	+	12,29	No Cq	Invalid	+	H+/H-	+	+	+	PA	+	PA	5	b
2023	2411	Saumon fumé Ecosse	Smoked salmon	+	16,55	41,18	valid	+	13,81	No Cq	Invalid	+	H+/H-	+	+	+	PA	+	PA	5	b
2023	2412	Saumon fumé chair crue	Smoked salmon	+	22,42	28,75	valid	+	19,06	36,29	valid	+	H+/H-	+	+	+	PA	+	PA	5	b
2023	334	Filet merlu sauce vierge	Cooked fish with sauce	-	34,35	29,06	valid	+	31,23	28,29	valid	+	H+	-	+	+	PD	+	PD	5	c
2023	335	Pané de cabillaud bio	Breaded organic fish	+	29,74	29,65	valid	+	26,82	29,14	valid	+	H+	+	+	+	PA	+	PA	5	c
2023	424	Crevettes cuites entières décortiquées	Peeled whole cooked shrimp	+	26,29	29,44	valid	+	21,51	25,94	valid	+	H+	+	+	+	PA	+	PA	5	c
2023	426	Aiguillettes de colin pané	RTRH breaded fish filet	+	24,97	29,93	valid	+	20,22	25,44	valid	+	H-	+	+	+	PA	+	PA	5	c

♦ Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.



## SEAFOOD AND FISHERY PRODUCTS

Year of analysis	N° Sample	Product (French name)	Product	Reference method : ISO 11290-1 ♦	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp														Category	Type		
				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																	
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C								Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C				
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies		All confirmatory tests	Final result		Final result				
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Final result	Agreement	Final result	Agreement									
2023	428	Paupiette de saumon		RTRH salmon filet	-	28,71		31,00	valid		+		24,21	26,54	valid	+	H+ ( <i>L. monocytogenes</i> )/H-	+	+	+	+	PD
2023	441	Dos de colin d'Alaska nature (cuit)	Cooked fish filet	+	17,01	No Cq	Invalid	+	12,95	32,82	Invalid	+	H+	+	+	+	+	PA	+	PA	5	c
2023	442	Crevettes cuites entières	Whole cooked shrimp	-	27,67	29,46	valid	+	22,98	26,14	valid	+	H+	+	+	+	+	PD	+	PD	5	c
2023	593	Pavé colin topping napolitain precuit	RTRH fish filet (Neapolitan sauce)	-	30,27	29,75	valid	+	24,9	25,42	valid	+	H+	+	+	+	+	PD	+	PD	5	c
2023	833	Colin pané	Breaded fish filet	-	27,55	29,76	valid	+	22,92	25,92	valid	+	H+/H-	+	+	+	+	PD	+	PD	5	c
2023	1032	Filet de truite meunière	RTRH fish filet (with sauce)	-	24,65	29,35	valid	+	19,86	25,81	valid	+	H+/H-	+	+	+	+	PD	+	PD	5	c
2023	1188	Brochette de poisson pané	Breaded fish filet	+	26,23	30,03	valid	+	21,72	26,59	valid	+	H-	+	+	+	+	PA	+	PA	5	c
2023	1332	Filet de truite meunière bio	RTRH fish filet with sauce	-	22,58	31,75	valid	+	18,6	25,88	valid	+	H-	+	+	+	+	PD	+	PD	5	c
2023	1466	Filet de poisson pané	Breaded fish filet	+	23,24	31,92	valid	+	18,49	27,88	valid	+	H+/H-	+	+	+	+	PA	+	PA	5	c
2023	1467	Filet de poisson pané	Breaded fish filet	+	29,11	29,08	valid	+	24,36	26,52	valid	+	H+/H-	+	+	+	+	PA	+	PA	5	c
2023	1483	Dos de colin d'Alaska nature cuit	Cooked fish filet	+	21,86	31,21	valid	+	17,71	26,87	valid	+	H+	+	+	+	+	PA	+	PA	5	c

## PRODUCTION ENVIRONMENTAL SAMPLES

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				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C								Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies		All confirmatory tests	Final result		Final result			
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Final result	Agreement	Final result	Agreement								
2023	832	Déchets production saumon (industrie de produits de la mer)	Waste, salmon filet (Seafood industry)	+	26,08	30,71	valid	+	21,98	26,23	valid	+	H+	+	+	+	PA	+	PA	6	a
2023	1038	Chûte de parage saumon (industrie de produits de la mer)	Waste, salmon (Seafood industry)	+	25,43	29,46	valid	+	21,08	26,78	valid	+	H+	+	+	+	PA	+	PA	6	a
2023	1039	Déchets de porc ramassés au sol (industrie de produits carnés)	Waste, pork meat (meat products industry)	+	31,04	31,71	valid	+	26,16	29,57	valid	+	H+/H-	+	+	+	PA	+	PA	6	a
2023	1662	Déchet de production Morue (industrie de produits de la mer)	Waste, fish (seafood industry)	+	30,67	29,37	valid	+	25,43	25,38	valid	+	H+	-	+	+	PA	+	PA	6	a
2023	1663	Déchet de production Brandade sous doseuse (industrie de produits de la mer)	Waste, fish (seafood industry)	+	21,85	32,44	valid	+	17,44	26,33	valid	+	H+	+	+	+	PA	+	PA	6	a
2023	1900	Déchets découpe porc (production saucisse)	Waste, pork meat (production of sausage)	-	30,08	27,87	valid	+	25,59	25,86	valid	+	H-	+	+	+	PD	+	PD	6	a
2023	1901	Déchets découpe porc (production saucisse)	Waste, pork meat (production of sausage)	+	21,66	29,48	valid	+	17,81	26,59	valid	+	H-	+	+	+	PA	+	PA	6	a
2023	1902	Déchets de plats préparés, riz espagnol (industrie de plats préparés)	Waste, RTRH food with rice (RTRH food industry)	+	20,15	33,51	valid	+	16,25	28,61	valid	+	H-	+	+	+	PA	+	PA	6	a
2023	1903	Déchets de plats préparés, sauce champignons (industrie de plats préparés)	Waste, RTRH food with mushrooms sauce (RTRH food industry)	+	15,93	No Cq	Invalid	+	12,4	33,72	Invalid	+	H+/H-	+	+	+	PA	+	PA	6	a
2023	1904	Déchets de plats préparés, crêpes bretonnes (industrie de plats préparés)	Waste, RTRH food pancake (RTRH food industry)	+	No Cq	29,55	valid	-	No Cq	27,46	valid	-	-	-	-	-	ND	-	ND	6	a
2023	2398	Déchet produit carné (production de jambon saumuré)	Waste, meat product (production of ham)	+	No Cq	27,60	valid	-	No Cq	29,61	valid	-	st	-	-	-	ND	-	ND	6	a
2023	2400	Déchet produit carné 2 (production de jambon saumuré)	Waste, meat product (production of ham)	+	No Cq	27,66	valid	-	No Cq	29,69	valid	-	-	-	-	-	ND	-	ND	6	a
2023	837	Eau de process laveur automatique (industrie de produits de la mer)	Process water (Seafood industry)	+	22,10	34,07	valid	+	17,78	27,12	valid	+	H-	+	+	+	PA	+	PA	6	b

## PRODUCTION ENVIRONMENTAL SAMPLES

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				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C								Confirmation			CFX96 Touch™ (standard) 72h at 5°C±3°C		AriaMx™ 72h at 5°C±3°C			
					CFX96 Touch™ (standard)				AriaMx™				Typical colonies		All confirmatory tests	Final result		Final result			
<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	O&A (10 µL)	Palcam (10 µL)	Final result	Agreement	Final result	Agreement								
2023	1028	Eau de process, égout (industrie d'herbes aromatiques)	Process water (aromatic herbs industry)	+	34,41	29,50	valid	+	27,49	27,67	valid	+	H+	-	+	+	PA	+	PA	6	b
2023	1327	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	+	No Cq	29,83	valid	-	No Cq	25,56	valid	-	-	-	-	-	ND	-	ND	6	b
2023	1471	Eau de process, décongélation (industrie de produits de la mer)	Process water, thawing zone (Seafood industry)	-	40,25	28,75	valid	+	34,12	25,86	valid	+	H+	+	+	+	PD	+	PD	6	b
2023	1479	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	+	24,05	29,54	valid	+	18,87	25,88	valid	+	H+	+	+	+	PA	+	PA	6	b
2023	1486	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	+	21,58	33,18	valid	+	16,73	29,26	valid	+	H+	+	+	+	PA	+	PA	6	b
2023	1487	Eau de cuve de refroidissement (industrie de produits carnés, volaille)	Process water, cooling tank (meat products industry, poultry)	-	21,43	31,28	valid	+	16,91	27,59	valid	+	H+	+	+	+	PD	+	PD	6	b
2023	1672	Eau de process, cuve de refroidissement (industrie de produits carnés)	Process water (meat products industry)	+	20,09	38,17	valid	+	15,53	30,56	valid	+	H+	+	+	+	PA	+	PA	6	b
2023	2258	Eau de rinçage (production steak végétal + nuggets)	Rinse water (production of vegetable steak)	+	23,18	29,79	valid	+	19,35	25,36	valid	+	H+	+	+	+	PA	+	PA	6	b
2023	2260	Eau de rinçage (production porc saumuré jambon)	Rinse water (production of pork meat product)	-	40,00/ No Cq/ 38,99	29,12/ 31,25/ 29,31	valid/ valid/ valid	+/-/+	No Cq/ (37,87)/ 36,14	25,8/ 27,14/ 25,18	valid/ valid/ valid	-/-/+	H+(1)	-	+	+	PD	-	NA	6	b
2023	2815	Eau de rinçage, mélangeur/batteur zone 1 (production sardines)	Rinse water, blender, zone 1 (production of sardines)	+	No Cq	29,06	valid	-	No Cq	24,94	valid	-	st	st	-	-	ND	-	ND	6	b
2023	1886	Chiffonnette table de travail, après nettoyage (production steak végétal)	Wipe, working table, after cleaning (production of vegetable steak)	+	38,67	29,19	valid	+	32,15	25,15	valid	+	H+(3)	-	+	+	PA	+	PA	6	c
2023	1887	Chiffonnette paille, après nettoyage (production steak végétal)	Wipe, working table, after cleaning (production of vegetable steak)	+	30,25	29,18	valid	+	25,69	25,24	valid	+	H+	+	+	+	PA	+	PA	6	c

## PRODUCTION ENVIRONMENTAL SAMPLES

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				<i>Listeria</i> spp final result	18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth + storage 72h at 5°C±3°C																		
					BACGene <i>Listeria</i> spp. - PCR result - Storage 72h at 5°C±3°C												CFX96 Touch™ (standard) 72h at 5°C±3°C					AriaMx™ 72h at 5°C±3°C	
					CFX96 Touch™ (standard)				AriaMx™				Confirmation				Final result		Agreement				
					<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result	Typical colonies		All confirmatory tests	Final result	Agreement	Final result	Agreement				
Cq	result	Cq	result	O&A (10 µL)		Palcam (10 µL)																	
2023	1888	Chiffonnette raclette, après nettoyage (industrie de plats préparés)	Wipe, after cleaning (RTRH food industry)	-	30,34	29,05	valid	+	25,44	25,2	valid	+	H+	+	+	+	PD	+	PD	6	c		
2023	1889	Chiffonnette bac gris, après nettoyage (industrie de plats préparés)	Wipe, after cleaning (RTRH food industry)	+	21,48	31,74	valid	+	17,61	25,78	valid	+	H+	+	+	+	PA	+	PA	6	c		
2023	1890	Chiffonnette seau blanc, après nettoyage (industrie de plats préparés)	Wipe, after cleaning (RTRH food industry)	+	19,30	36,29	valid	+	15,27	29,37	Invalid	+	H+	+	+	+	PA	+	PA	6	c		
2023	1891	Chiffonnette tapis etripage, après nettoyage (industrie de produits de la mer)	Wipe, after cleaning (RTRH food industry)	+	26,93	29,08	valid	+	22,69	25,1	valid	+	H-ni/H-	+	+	+	PA	+	PA	6	c		
2023	1892	Eponge tapis emboitage, après nettoyage (industrie de produits de la mer)	Sponge, after cleaning (seafood industry)	+	27,82	29,18	valid	+	22,79	25,05	valid	+	H+ni/H+	+	+	+	PA	+	PA	6	c		
2023	1893	Eponge plateau, après nettoyage (industrie de produits de la mer)	Sponge, after cleaning (seafood industry)	+	29,98	29,30	valid	+	24,81	25,1	valid	+	H+ni/H+	+	+	+	PA	+	PA	6	c		
2023	2403	Chiffonnette hall avant nettoyage (production chipolatas)	Wipe, before cleaning, hall (production of sausage)	+	No Cq	27,42	valid	-	No Cq	29,47	valid	-	-	-	-	-	ND	-	ND	6	c		
2023	2404	Chiffonnette cutter avant nettoyage (production chipolatas)	Wipe, before cleaning, cutter (production of sausage)	+	No Cq	27,68	valid	-	No Cq	29,53	valid	-	-	-	-	-	ND	-	ND	6	c		
2023	2813	Ecouvillon, épineuse (industrie de produits de la mer)	Swab, instrument (seafood industry)	-	22,36	33,64	valid	+	17,05	25,28	valid	+	H+	+	+	+	PD	+	PD	6	c		
2023	2817	Ecouvillon étaleur (production pâte fine)	Swab, instrument to spread (production of paste)	-	22,53	29,93	valid	+	18,51	24,84	valid	+	H+	+	+	+	PD	+	PD	6	c		
2023	2818	Ecouvillon plan de travail (production de mousse de foie de porc)	Swab, working table (production of pork pâté)	-	21,72	31,37	valid	+	17,76	24,56	valid	+	H+	+	+	+	PD	+	PD	6	c		
2023	2819	Ecouvillon mélangeur (production de mousse de foie de porc)	Swab, mixer (production of pork pâté)	+	No Cq	29,08	valid	-	No Cq	25,05	valid	-	st	st	-	-	ND	-	ND	6	c		

**Appendix 12 – Relative level of detection study: raw data (Enrichment step using the BACGro ULTRA Listeria Broth (BULB) (Extension study, 2023))**

Matrix: Deli-salad  
 Strain: *L. monocytogenes* Ad494  
 Seeding protocol: Storage 48h at 2-8°C  
 UNPAIRED  
 Aerobic mesophilic flora: 3,9.10<sup>4</sup> CFU/g

N° sample	Level	Inoculation level (cfu/sample)	Reference method : ISO 11290-1*							Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp.											Number positive samples/Total				
										18h at 37°C±1°C - Pre-warmed BACGro ULTRA Listeria Broth															
										BACGene <i>Listeria</i> spp.- PCR result						Confirmation			Final result						
										CFX96 Touch™ (standard)			AriaMx™												
			Half Fraser		Fraser		Final Result <i>Listeria</i> spp.	Number positive samples/Total	<i>Listeria</i> spp. (Cq)	IPC (Cq)	Result <i>Listeria</i> spp.	<i>Listeria</i> spp. (Cq)	IPC (Cq)	Result <i>Listeria</i> spp.	Typical colonies		All confirmatory tests	CFX96 Touch™ (standard)	AriaMx™	CFX96 Touch™ (standard)			AriaMx™		
O&A	Palcam	O&A	Palcam	Cq	result	Cq			result	O&A (10 µL)	Palcam (10 µL)														
2091	0	/	-	-	-	-	-	0/5	No Cq	29,38	valid	-	No Cq	26,47	valid	-	-	-	-	-	-	-	-		
2092			No Cq	30,02	valid	-	No Cq		26,6	valid	-	-	-	-	-	-	-	-	-	-	-	-	-		
2093			No Cq	29,12	valid	-	No Cq		25,99	valid	-	-	-	-	-	-	-	-	-	-	-	-	-		
2094			No Cq	29,28	valid	-	No Cq		26,22	valid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2095			No Cq	29,31	valid	-	No Cq		25,97	valid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2096	Low	0,8	-	-	-	-	-	10/20	No Cq	29,24	valid	-	No Cq	26,98	valid	-	-	-	-	-	-	-	-	-	
2097			No Cq	29,47	valid	-	No Cq		26,91	valid	-	-	-	-	-	-	-	-	-	-	-	-	-		
2098			26,45	30,88	valid	+	22,04		27,16	valid	+	H+	-	+	+	+	+	+	+	+	+	+	+	+	
2099			28,58	29,42	valid	+	24,24		26,16	valid	+	H+	-	+	+	+	+	+	+	+	+	+	+	+	
2100			-	-	-	-	-		No Cq	29,61	valid	-	No Cq	26,61	valid	-	-	-	-	-	-	-	-	-	-
2101			H+	+	H+	+	+		25,32	30,07	valid	+	21,15	26,18	valid	+	H+	+	+	+	+	+	+	+	+
2102			H+	+	H+	+	+		25,29	30,34	valid	+	21,41	26,47	valid	+	H+	+	+	+	+	+	+	+	+
2103			H+	+	H+	+	+		No Cq	29,50	valid	-	No Cq	26,5	valid	-	-	-	-	-	-	-	-	-	-
2104			H+	+	H+	+	+		No Cq	29,34	valid	-	No Cq	26,76	valid	-	-	-	-	-	-	-	-	-	-
2105			-	-	-	-	-		22,92	31,96	valid	+	20,25	29,25	valid	+	H+	+	+	+	+	+	+	+	+
2106			-	-	-	-	-		33,96	29,62	valid	+	29,75	27,98	valid	+	H+	-	+	+	+	+	+	+	+
2107			H+	+	H+	+	+		26,92	29,43	valid	+	23,1	26,44	valid	+	H+	-	+	+	+	+	+	+	+
2108			H+	+	H+	+	+		31,42	29,61	valid	+	26,82	27,29	valid	+	H+	-	+	+	+	+	+	+	+
2109			H+	-	H+	+	+		No Cq	29,66	valid	-	No Cq	26,39	valid	-	-	-	-	-	-	-	-	-	-
2110			-	-	-	-	-		No Cq	29,34	valid	-	No Cq	26,61	valid	-	-	-	-	-	-	-	-	-	-
2111	-	-	-	-	-	25,60	29,88	valid	+	21,77	26,54	valid	+	H+	+	+	+	+	+	+	+	+			
2112	-	-	-	-	-	25,08	29,50	valid	+	21,72	27,3	valid	+	H+	+	+	+	+	+	+	+	+			
2113	H+	+	H+	+	+	27,55	29,26	valid	+	23,82	26,67	valid	+	H+	+	+	+	+	+	+	+	+			
2114	H+	+	H+	+	+	No Cq	29,45	valid	-	No Cq	26,79	valid	-	-	-	-	-	-	-	-	-	-			
2115	H+	+	H+	+	+	31,62	29,32	valid	+	27,76	26,39	valid	+	H+	-	+	+	+	+	+	+	+			
2116	High	3,3	H+	+	H+	+	+	5/5	33,16	29,15	valid	+	28,74	26,26	valid	+	H+	-	+	+	+	+	+		
2117			H+	+	H+	+	+		26,15	29,23	valid	+	22,43	26,2	valid	+	H+	+	+	+	+	+	+		
2118			H+	+	H+	+	+		28,46	29,13	valid	+	24,92	26,24	valid	+	H+	-	+	+	+	+	+	+	
2119			H+	+	H+	+	+		No Cq	29,74	valid	-	No Cq	26,6	valid	-	-	-	-	-	-	-	-	-	-
2120			H+	+	H+	+	+		28,80	29,25	valid	+	25,09	26,44	valid	+	H+	-	+	+	+	+	+	+	+

\* Analyses performed according to the COFRAC accreditation  
 ADRIA  
 Summary report (Version 0)  
 BACGene *Listeria* spp.



Matrix: Frankfurters  
 Strain: *L. monocytogenes* Ad669  
 Seeding protocol: Storage 48h at 2-8°C  
 UNPAIRED  
 Aerobic mesophilic flora: 1,0.10<sup>7</sup> CFU/g

N° sample	Level	Inoculation level (cfu/sample)	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp.																	Number positive samples/Total				
			Reference method : ISO 11290-1*						18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth													Final result		
			BACGene <i>Listeria</i> spp. - PCR result						CFX96 Touch™ (standard)					AriaMx™										Confirmation
			Half Fraser		Fraser		Final Result <i>Listeria</i> spp.	Number positive samples/Total	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result <i>Listeria</i> spp.	<i>Listeria</i> spp. (Cq)	IPC (Cq)		Result <i>Listeria</i> spp.	Typical colonies					CFX96 Touch™ (standard)	AriaMx™	
O&A	Palcam	O&A	Palcam	Cq	result	Cq				result	O&A (10 µL)			Palcam (10 µL)	All confirmatory tests									
1687	0	/	st	st	st	st	-	0/5	No Cq	29,31	valid	-	No Cq	25,59	valid	-	-	-	-	-	-			
1688			st	st	st	st	-		No Cq	29,22	valid	-	No Cq	25,83	valid	-	-	-	-	-	-			
1689			st	st	st	st	-		No Cq	29,65	valid	-	No Cq	25,61	valid	-	-	-	-	-	-			
1690			st	st	st	st	-		No Cq	29,60	valid	-	No Cq	25,61	valid	-	st	-	-	-	-			
1691			st	st	st	st	-		29,32/ 28,65/ 28,37	29,27/ 29,52/ 29,51	valid/ valid/ valid	+/+	24,87/ 26,06/ 26,43	25,66/ 25,10/ 25,33	valid/ valid/ valid	+/+	H- ( <i>L. innocua</i> )	+	+	+	+			
1692	Low	0,5	H+	+	H+	+	+	9/20	21,55	33,14	valid	+	17,33	27,23	valid	+	H+	+	+	+	+			
1693			H+	+	H+	+	+		22,64	30,90	valid	+	18,7	26,92	valid	+	H+	+	+	+	+			
1694			H+	+	H+	+	+		41,59/ No Cq/ No Cq	29,41/ 29,49/ 30,05	valid/ valid/ valid	+/-	No Cq	25,89	valid	-	st	-	-	-	-			
1695			st	st	st	st	-		No Cq	29,38	valid	-	No Cq	25,63	valid	-	st	-	-	-	-			
1696			st	st	st	st	-		No Cq	29,29	valid	-	No Cq	25,57	valid	-	st	-	-	-	-			
1697			st	st	st	st	-		No Cq	29,33	valid	-	No Cq	25,65	valid	-	st	-	-	-	-			
1698			st	st	st	st	-		21,25	34,19	valid	+	16,83	29,27	valid	+	H+	+	+	+	+			
1699			st	st	st	st	-		22,18	31,37	valid	+	17,77	26,93	valid	+	H+	+	+	+	+			
1700			H+	+	H+	+	+		No Cq	29,30	valid	-	No Cq	25,82	valid	-	st	-	-	-	-			
1701			st	st	st	st	-		21,49	32,73	valid	+	16,67	29,08	valid	+	H+	+	+	+	+			
1702			st	st	st	st	-		22,69	31,31	valid	+	18,49	26,41	valid	+	H+	+	+	+	+			
1703			st	st	st	st	-		21,79	31,87	valid	+	17,58	26,86	valid	+	H+	+	+	+	+			
1704			H+	+	H+	+	+		No Cq	29,25	valid	-	No Cq	25,81	valid	-	st	-	-	-	-			
1705			H+	+	H+	+	+		No Cq	29,14	valid	-	No Cq	25,75	valid	-	st	-	-	-	-			
1706			st	st	st	st	-		No Cq	29,33	valid	-	No Cq	25,72	valid	-	-	-	-	-	-			
1707	H+	+	H+	+	+	No Cq	29,28	valid	-	No Cq	25,58	valid	-	st	-	-	-	-						
1708	st	st	st	st	-	22,48	31,15	valid	+	18,75	26,11	valid	+	H+	+	+	+	+						
1709	H+	+	H+	+	+	No Cq	29,32	valid	-	No Cq	25,8	valid	-	st	-	-	-	-						
1710	st	st	st	st	-	24,45	29,69	valid	+	19,75	25,67	valid	+	H+	+	+	+	+						
1711	H+	+	H+	+	+	No Cq	29,24	valid	-	No Cq	25,52	valid	-	st	-	-	-	-						
1712	High	2,2	H+	+	H+	+	+	5/5	21,36	31,98	valid	+	17,38	28,14	valid	+	H+	+	+	+	+			
1713			H+	+	H+	+	+		23,46	30,18	valid	+	19,44	26,42	valid	+	H+	+	+	+	+			
1714			H+	+	H+	+	+		20,55	34,43	valid	+	17,01	28,84	valid	+	H+	+	+	+	+			
1715			H+	+	H+	+	+		21,72	31,73	valid	+	17,48	27,42	valid	+	H+	+	+	+	+			
1716			H+	+	H+	+	+		22,01	31,62	valid	+	17,97	26,59	valid	+	H+	+	+	+	+			

\* Analyses performed according to the COFRAC accreditation  
 ADRIA  
 Summary report (Version 0)  
 BACGene *Listeria* spp.

Matrix: Soft white cheese  
 Strain: *L. ivanovii* Ad1737  
 Seeding protocol: Storage 48h at 2-8°C  
 UNPAIRED  
 Aerobic mesophilic flora: 2,0.10<sup>7</sup> CFU/g

N° sample	Level	Inoculation level (cfu/sample)	Reference method : ISO 11290-1*					Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp.														Number positive samples/Total			
								18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth																	
			BACGene <i>Listeria</i> spp. - PCR result										Confirmation				Final result								
			CFX96 Touch™ (standard)					AriaMx™					Typical colonies			All confirmatory tests	CFX96 Touch™ (standard)	AriaMx™							
			Half Fraser		Fraser		Final Result <i>Listeria</i> spp.	Number positive samples/Total	<i>Listeria</i> spp. (Cq)		IPC (Cq)	Result <i>Listeria</i> spp.	<i>Listeria</i> spp. (Cq)		IPC (Cq)	Result <i>Listeria</i> spp.	O&A (10 µL)		Palcam (10 µL)	All confirmatory tests	CFX96 Touch™ (standard)	AriaMx™	CFX96 Touch™ (standard)	AriaMx™	
O&A	Palcam	O&A	Palcam	<i>Listeria</i> spp. (Cq)	IPC (Cq)	result			<i>Listeria</i> spp. (Cq)	IPC (Cq)			result	O&A			Palcam								
2281	0	/	-	-	st	-	-	0/5	No Cq	29,43	valid	-	No Cq	25,55	valid	-	-	-	-	-	-	-	-		
2282			-	-	st	-	-		No Cq	30,31	valid	-	No Cq	25,66	valid	-	-	-	-	-	-	-	-		
2283			st	st	st	st	-		No Cq	31,07	valid	-	No Cq	25,74	valid	-	-	-	-	-	-	-	-		
2284			-	st	st	st	-		No Cq	29,39	valid	-	No Cq	25,62	valid	-	-	-	-	-	-	-	-	-	
2285			-	st	st	st	-		No Cq	29,37	valid	-	No Cq	25,70	valid	-	-	-	-	-	-	-	-	-	
2286	Low	0,8	H+	+	H+	+	+	11/20	29,74	29,37	valid	+	25,75	25,80	valid	+	H+	+(3)	+	+	+	+	+		
2287			-	st	st	st	-		No Cq	29,44	valid	-	No Cq	26,15	valid	-	-	-	-	-	-	-	-	-	
2288			-	-	st	-	-		31,49	29,33	valid	+	27,20	25,58	valid	+	H+	-	+	+	+	+	+	+	
2289			-	-	st	st	-		30,52	30,07	valid	+	25,65	25,46	valid	+	H+	+(1)	+	+	+	+	+	+	
2290			st	st	st	-	-		No Cq	29,89	valid	-	No Cq	25,54	valid	-	-	-	-	-	-	-	-	-	-
2291			st	-	st	st	-		No Cq	30,09	valid	-	No Cq	25,52	valid	-	-	-	-	-	-	-	-	-	-
2292			H+	+	H+	+	+		No Cq	29,48	valid	-	No Cq	25,58	valid	-	-	-	-	-	-	-	-	-	-
2293			st	-	st	st	-		No Cq	29,61	valid	-	No Cq	25,67	valid	-	-	-	-	-	-	-	-	-	-
2294			st	st	st	st	-		No Cq	29,37	valid	-	No Cq	26,06	valid	-	-	-	-	-	-	-	-	-	-
2295			H+	+	H+	+	+		32,15	29,23	valid	+	27,96	26,35	valid	+	H+	-	+	+	+	+	+	+	+
2296			H+	+	H+	+	+		No Cq	29,26	valid	-	No Cq	25,59	valid	-	-	-	-	-	-	-	-	-	-
2297			H+	+	H+	+	+		No Cq	29,24	valid	-	No Cq	25,52	valid	-	-	-	-	-	-	-	-	-	-
2298			st	-	st	-	-		31,35	29,30	valid	+	27,01	25,56	valid	+	H+	-	+	+	+	+	+	+	+
2299			H+	+	H+	+	+		30,48	29,16	valid	+	26,49	25,50	valid	+	H+	+(1)	+	+	+	+	+	+	+
2300			H+	+	H+	+	+		No Cq	29,17	valid	-	No Cq	25,39	valid	-	-	-	-	-	-	-	-	-	-
2301			H+	+	H+	+	+		No Cq	29,35	valid	-	No Cq	25,52	valid	-	-	-	-	-	-	-	-	-	-
2302			-	-	st	-	-		32,03	29,40	valid	+	27,73	25,79	valid	+	H+	-	+	+	+	+	+	+	+
2303			H+	+	H+	+	+		29,81	29,14	valid	+	25,78	25,99	valid	+	H+	+	+	+	+	+	+	+	+
2304			H+	+	H+	+	+		No Cq	29,27	valid	-	No Cq	25,59	valid	-	-	-	-	-	-	-	-	-	-
2305			H+	+	H+	+	+		No Cq	29,41	valid	-	No Cq	25,55	valid	-	-	-	-	-	-	-	-	-	-
2306	High	3,3	H+	+	H+	+	+	5/5	30,11	29,11	valid	+	25,97	25,70	valid	+	H+	-	+	+	+	+	+		
2307			H+	+	H+	+	+		No Cq	29,22	valid	-	No Cq	25,52	valid	-	-	-	-	-	-	-	-	-	
2308			H+	+	H+	+	+		28,59	29,32	valid	+	24,71	25,77	valid	+	H+	+(3)	+	+	+	+	+	+	
2309			H+	+	H+	+	+		28,06	29,17	valid	+	23,95	25,47	valid	+	H+	-	+	+	+	+	+	+	+
2310			H+	+	H+	+	+		28,00	29,21	valid	+	23,72	25,82	valid	+	H+	+(3)	+	+	+	+	+	+	+

\* Analyses performed according to the COFRAC accreditation  
 ADRIA  
 Summary report (Version 0)  
 BACGene *Listeria* spp.



Matrix: Frozen green peas

Strain: *Listeria seeligeri* Ad1754

Seeding protocol: Storage 2 weeks at - 20°C

UNPAIRED

Aerobic mesophilic flora: 1,4.10<sup>9</sup> CFU/g

N° sample	Level	Inoculation level (cfu/sample)	Reference method : ISO 11290-1*					Number positive samples/Total	Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp.											Number positive samples/Total			
			18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth											Final result									
			BACGene <i>Listeria</i> spp. - PCR result						Confirmation														
			CFX96 Touch™ (standard)			AriaMx™			Typical colonies			All confirmatory tests	CFX96 Touch™ (standard)			AriaMx™							
O&A	Palcam	Fraser	Fraser	Final Result <i>Listeria</i> spp.	<i>Listeria</i> spp. (Cq)	IPC (Cq)	Result <i>Listeria</i> spp.	<i>Listeria</i> spp. (Cq)	IPC (Cq)	Result <i>Listeria</i> spp.	O&A (10 µL)			Palcam (10 µL)									
1587	0	/	-	-	-	-	-	No Cq	30,14	valid	-	No Cq	24,77	valid	-	-	-	-	-	-	0/5	0/5	
1588			-	-	st	-	-	No Cq	29,99	valid	-	No Cq	24,83	valid	-	-	-	-	-	-			
1589			-	-	-	-	-	No Cq	29,87	valid	-	No Cq	24,74	valid	-	-	-	-	-	-			
1590			-	-	-	-	-	No Cq	30,04	valid	-	No Cq	24,6	valid	-	-	-	-	-	-			
1591			-	-	-	-	-	No Cq	29,89	valid	-	No Cq	24,81	valid	-	-	-	-	-	-			
1592	Low	0,4	H-ni/H-	+	H-	+	+	23,09	29,90	valid	+	18,81	25,08	valid	+	H-ni/H-	+	+	+	+	7/20	11/20	11/20
1593			-	-	-	-	-	31,98	28,81	valid	+	26,78	25,18	valid	+	H-dni/- (H-after subculture)	+(1)	+	+	+			
1594			-	-	-	-	-	22,25	30,02	valid	+	18,29	25,21	valid	+	H-ni/H-	+	+	+	+			
1595			H-ni/H-	+	H-	+	+	No Cq	28,95	valid	-	No Cq	25,07	valid	-	-	-	-	-	-			
1596			-	-	st	-	-	36,77	29,02	valid	+	32,47	25,07	valid	+	H-dni/H-dni (H- after subculture: <i>L. seeligeri</i> )	-(+ after subculture)	+	+	+			
1597			H-dni/H-	+	H-	+	+	No Cq	29,03	valid	-	No Cq	25,38	valid	-	-	-	-	-	-			
1598			-	-	-	-	-	25,88	28,96	valid	+	21,78	25,21	valid	+	H-dni/H-	+	+	+	+			
1599			H-dni/H-	+	H-	+	+	32,21	28,64	valid	+	28,07	25,27	valid	+	H-dni/H-	-	+	+	+			
1600			-	-	st	-	-	No Cq	29,02	valid	-	No Cq	25,14	valid	-	-	-	-	-	-			
1601			-	-	-	-	-	No Cq	28,88	valid	-	No Cq	25,16	valid	-	-	-	-	-	-			
1602			H-ni/H-	+	H-	+	+	40,36	28,71	valid	+	34,22	25,27	valid	+	H-dni/H-	-	+	+	+			
1603			-	-	st	-	-	23,46	29,37	valid	+	19,25	25,57	valid	+	H-ni/H-	+	+	+	+			
1604			-	-	-	-	-	No Cq	28,90	valid	-	No Cq	25,39	valid	-	-	-	-	-	-			
1605			-	-	-	-	-	No Cq	28,96	valid	-	No Cq	25,76	valid	-	-	-	-	-	-			
1606			-	-	st	-	-	No Cq	29,13	valid	-	No Cq	25,7	valid	-	-	-	-	-	-			
1607	-	-	-	-	-	No Cq	29,09	valid	-	No Cq	25,5	valid	-	-	-	-	-	-					
1608	-	-	-	-	-	No Cq	29,01	valid	-	No Cq	25,31	valid	-	-	-	-	-	-					
1609	H-dni/H-	+	H-	+	+	23,41	29,31	valid	+	18,8	24,93	valid	+	H-	+	+	+	+					
1610	H-	+	H-	+	+	23,44	29,27	valid	+	19,42	24,96	valid	+	H-	+	+	+	+					
1611	-	-	st	-	-	27,91	28,71	valid	+	23,38	25,08	valid	+	H-	+(1)	+	+	+					
1612	H-	+	H-	+	+	21,23	31,29	valid	+	17,33	25,64	valid	+	H-	+	+	+	+					
1613	H-	+	H-	+	+	No Cq	28,95	valid	-	No Cq	25,52	valid	-	-	-	-	-	-					
1614	H-ni/H-	+	H-	+	+	22,33	30,85	valid	+	17,73	25,65	valid	+	H-	+	+	+	+					
1615	High	1,6	-	-	-	-	-	36,92	29,02	valid	+	34,74	25,36	valid	+	-(H- after subculture: <i>L. seeligeri</i> )	-(+after subculture)	+	+	+	4/5	4/5	
1616			H-ni/H-	+	H-	+	+	21,96	30,58	valid	+	17,42	25,24	valid	+	H-	+	+	+				

\* Analyses performed according to the COFRAC accreditation

Matrix: Frozen cooked shrimps

Strain: *Listeria innocua* Ad1200

Seeding protocol: Storage 2 weeks at - 20°C

UNPAIRED

Aerobic mesophilic flora: 5,6.10<sup>4</sup> CFU/g

N° sample	Level	Inoculation level (cfu/sample)	Reference method : ISO 11290-1*						Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp.											Number positive samples/Total			
									18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth													Final result	
			Number positive samples/Total						BACGene <i>Listeria</i> spp. - PCR result						Confirmation								
									CFX96 Touch™ (standard)			AriaMx™			Typical colonies			CFX96 Touch™ (standard)	AriaMx™			CFX96 Touch™ (standard)	AriaMx™
O&A	Palcam	O&A	Palcam	Final Result <i>Listeria</i> spp.	<i>Listeria</i> monocytogenes (Cq)	IPC (Cq)	Result <i>Listeria</i> spp.	<i>Listeria</i> monocytogenes (Cq)	IPC (Cq)	Result <i>Listeria</i> spp.	O&A (10 µL)	Palcam (10 µL)	All confirmatory tests										
1820	0	/	-	-	-	-	-	No Cq	29,25	valid	-	No Cq	25,09	valid	-	H-d (cocci)	-	-	-	-	0/5	0/5	
1821			-	-	-	-	-	No Cq	29,29	valid	-	No Cq	25,2	valid	-	-	-	-	-				
1822			-	st	-	-	-	No Cq	28,98	valid	-	No Cq	25,18	valid	-	-	-	-	-				
1823			-	-	st	-	-	No Cq	28,96	valid	-	No Cq	25,06	valid	-	-	-	-	-				
1824			-	st	-	st	-	No Cq	28,81	valid	-	No Cq	25,25	valid	-	-	-	-	-				
1825	Low	0,8	-	-	st	-	-	28,01	29,05	valid	+	23,8	25,78	valid	+	H-	+	+	+	+	14/20	15/20	15/20
1826			H-	+	H-	+	+	30,23	29,07	valid	+	26,25	25,71	valid	+	H-	+	+	+	+			
1827			-	-	st	-	-	28,35	29,08	valid	+	24,44	25,62	valid	+	H-	+	+	+	+			
1828			H-	+	H-	+	+	33,29	29,18	valid	+	29	25,48	valid	+	H-	+	+	+	+			
1829			-	-	st	-	-	37,89	29,30	valid	+	32,24	25,8	valid	+	H-	+(1)	+	+	+			
1830			H-	+	H-	+	+	29,85	29,21	valid	+	25,81	25,73	valid	+	H-	+	+	+	+			
1831			-	-	st	st	-	28,38	29,13	valid	+	24,67	25,8	valid	+	H-	+	+	+	+			
1832			H-	+	H-	+	+	No Cq	29,18	valid	-	No Cq	25,87	valid	-	H-d/-	-	-	-	-			
1833			H-	+	H-	+	+	34,26	29,28	valid	+	30,24	25,7	valid	+	H-	+	+	+	+			
1834			H-	+	H-	+	+	No Cq	29,35	valid	-	No Cq	25,7	valid	-	-	-	-	-	-			
1835			H-	+	H-	+	+	25,27	29,64	valid	+	20,97	25,54	valid	+	H-	+	+	+	+			
1836			H-	+	H-	+	+	31,91	29,23	valid	+	27,57	25,85	valid	+	H-	+	+	+	+			
1837			-	-	st	st	-	No Cq	29,24	valid	-	No Cq	25,66	valid	-	-	-	-	-	-			
1838			-	-	st	st	-	30,00	29,16	valid	+	26,06	25,85	valid	+	H-	-	+	+	+			
1839			H-	+	H-	+	+	34,61	29,05	valid	+	30,23	25,98	valid	+	H-	+	+	+	+			
1840			H-	+	H-	+	+	32,14	29,15	valid	+	28,57	25,96	valid	+	H-	-	+	+	+			
1841			H-	+	H-	+	+	No Cq	29,11	valid	-	41,98	25,73	valid	-	-	st	-	-	-			
1842			H-	+	H-	+	+	31,78	29,16	valid	+	27,48	25,61	valid	+	H-	+	+	+	+			
1843			H-	+	H-	+	+	No Cq	29,12	valid	-	No Cq	25,66	valid	-	-	-	-	-	-			
1844			H-	+	H-	+	+	33,14	29,22	valid	+	29,3	25,6	valid	+	H-	+	+	+	+			
1845	High	2,4	H-	+	H-	+	+	33,04	29,31	valid	+	28,89	25,53	valid	+	H-	+	+	+	+	4/5	5/5	5/5
1846			H-	+	H-	+	+	29,96	29,01	valid	+	26,29	25,65	valid	+	H-	+	+	+	+			
1847			-	-	st	st	-	27,16	29,19	valid	+	23,04	25,79	valid	+	H-	+	+	+	+			
1848			H-	+	H-	+	+	32,22	29,25	valid	+	27,88	25,71	valid	+	H-	+	+	+	+			
1849			H-	+	H-	+	+	34,90	29,45	valid	+	31,06	25,51	valid	+	H-	+	+	+	+			

\* Analyses performed according to the COFRAC accreditation

ADRIA

Summary report (Version 0)

BACGene *Listeria* spp.

Matrix: Process water (veggie sausage production)

Strain: *L. monocytogenes* Ad551

Seeding protocol: Storage 48h at 2-8°C

UNPAIRED

Aerobic mesophilic flora: 1.3.10<sup>6</sup> CFU/g

N° sample	Level	Inoculation level (cfu/sample)	Reference method : ISO 11290-1*						Alternative method: BACGene <i>Listeria</i> spp. - Detection of <i>Listeria</i> spp.												Number positive samples/Total	
									18h at 37°C±1°C - Pre-warmed BACGro ULTRA <i>Listeria</i> Broth													
			Number positive samples/Total						BACGene <i>Listeria</i> spp. - PCR result						Confirmation			Final result				
									CFX96 Touch™ (standard)			AriaMx™			Typical colonies			All confirmatory tests	CFX96 Touch™ (standard)	AriaMx™		
O&A	Palcam	O&A	Palcam	Final Result <i>Listeria</i> spp.	<i>Listeria</i> spp (Cq)	IPC (Cq)	Result <i>Listeria</i> spp.	<i>Listeria</i> spp (Cq)	IPC (Cq)	Result <i>Listeria</i> spp.	O&A (10 µL)	Palcam (10 µL)	CFX96 Touch™ (standard)	AriaMx™								
2661	0	/	st	st	st	st	-	0/5	No Cq	29,90	valid	-	No Cq	26,49	valid	-	st	st	-	-	0/5	0/5
2662			st	st	st	st	-		No Cq	29,95	valid	-	No Cq	26,43	valid	-	st	st	-	-		
2663			st	st	st	st	-		No Cq	29,78	valid	-	No Cq	26,21	valid	-	st	st	-	-		
2664			st	st	st	st	-		No Cq	29,78	valid	-	No Cq	26,33	valid	-	st	st	-	-		
2665			st	st	st	st	-		No Cq	29,65	valid	-	No Cq	26,48	valid	-	st	st	-	-		
2666	Low	0,7	H+	+	H+	+	+	13/20	25,11	31,18	valid	+	20,52	26,73	valid	+	H+	+	+	+	11/20	11/20
2667			H+	+	H+	+	+		23,82	31,65	valid	+	19,54	27,17	valid	+	H+	+	+	+		
2668			H+	+	H+	+	+		No Cq	29,79	valid	-	No Cq	26,34	valid	-	st	st	-	-		
2669			H+	+	H+	+	+		No Cq	30,13	valid	-	No Cq	26,27	valid	-	st	st	-	-		
2670			H+	+	H+	+	+		No Cq	30,17	valid	-	No Cq	26,36	valid	-	-	-	-	-		
2671			-	-	-	-	-		24,55	33,52	valid	+	19,48	26,61	valid	+	H+	+	+	+		
2672			H+	+	H+	+	+		27,00	30,21	valid	+	22,52	26,17	valid	+	H+	+	+	+		
2673			-	-	-	-	-		No Cq	30,00	valid	-	No Cq	26,66	valid	-	st	st	-	-		
2674			-	-	-	-	-		23,62	32,39	valid	+	19,48	27,09	valid	+	H+	+	+	+		
2675			-	-	-	-	-		29,45	29,67	valid	+	24,95	26,95	valid	+	H+	+	+	+		
2676			H+	+	H+	+	+		24,63	30,61	valid	+	20,58	26,81	valid	+	H+	+	+	+		
2677			H+	+	H+	+	+		22,35	34,16	valid	+	17,97	28,74	valid	+	H+	+	+	+		
2678			H+	+	H+	+	+		No Cq	29,72	valid	-	No Cq	26,37	valid	-	st	st	-	-		
2679			H+	+	H+	+	+		23,98	31,16	valid	+	19,53	26,41	valid	+	H+	+	+	+		
2680			-	-	-	-	-		No Cq	29,87	valid	-	No Cq	26,5	valid	-	st	st	-	-		
2681			H+	+	H+	+	+		24,16	30,99	valid	+	19,87	26,61	valid	+	H+	+	+	+		
2682			-	-	-	-	-		No Cq	29,64	valid	-	No Cq	26,65	valid	-	st	st	-	-		
2683			H+	+	H+	+	+		No Cq	29,65	valid	-	No Cq	27,13	valid	-	st	st	-	-		
2684			H+	+	H+	+	+		No Cq	29,64	valid	-	No Cq	26,51	valid	-	st	st	-	-		
2685			-	-	-	-	-		26,06	30,02	valid	+	21,43	26,43	valid	+	H+	+	+	+		
2686	High	2,6	H+	+	H+	+	+	4/5	22,15	32,42	valid	+	17,82	28,21	valid	+	H+	+	+	+	4/5	4/5
2687			H+	+	H+	+	+		No Cq	29,74	valid	-	No Cq	26,47	valid	-	st	st	-	-		
2688			-	-	-	-	-		26,07	30,13	valid	+	21,6	26,34	valid	+	H+	+	+	+		
2689			H+	+	H+	+	+		23,52	31,49	valid	+	19,28	26,65	valid	+	H+	+	+	+		
2690			H+	+	H+	+	+		24,33	31,39	valid	+	20,14	27,52	valid	+	H+	+	+	+		

\* Analyses performed according to the COFRAC accreditation