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NF VALIDATION - Validation of alternative analysis methods
Application to the food industry

Summary report
according to the standard EN ISO 16140-2:2016

Qualitative method

Listeria Precis™ (Detection method)
(certificate # UNI 03/14 – 06/22)
for the detection of *Listeria* species in a broad range of foods and in environmental samples

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Version 2 March 20, 2023

Preamble

- **Protocols of validation :**

- **EN ISO 16140-1 and EN ISO 16140-2 (September 2016): Microbiology of the food chain — Method validation**
  Part 1: Vocabulary.
  Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method.

- **Requirements regarding comparison and interlaboratory studies for implementation of the standard EN ISO 16140-2 (project version 7).**

- **Reference method:**

- **EN ISO 11290-1 (February 1997) :** Microbiology of food and animal feeding stuffs - Horizontal method for the detection and enumeration of *Listeria monocytogenes* – Part 1: detection method
- **EN ISO 11290-1/A1 (February 2005)**
- **EN ISO 11290-1 (July 2017):** Microbiology of the food chain - Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp- Part 1: Detection method.

- **Application scope:**

- **All human food products** by a validation testing of a broad range of foods, including:
  - composite foods,
  - meat products,
  - dairy products,
  - seafood products,
  - vegetables,
- **Environmental samples.**

- **Certification body:**

- **AFNOR Certification** (https://nf-validation.afnor.org/).

Definitions

- **Method comparison study**

The method comparison study is the part of the validation process that is performed in the organizing laboratory. It consists of three parts namely the following:
- A comparative study of the results of the reference method to the results of the alternative method in (naturally and/or artificially) contaminated samples (so-called sensitivity study);
- A comparative study to determine the relative level of detection (RLOD) in artificially contaminated samples (so-called RLOD study);
- An inclusivity/exclusivity study of the alternative method.

- **Sensitivity study**

The sensitivity study aims to determine the difference in sensitivity between the reference and the alternative method.
The sensitivity is the ability of the reference method or alternative method to detect the analyte.

- **Relative level of detection study**

A comparative study is conducted to evaluate the level of detection (LOD) of the alternative method against the reference method. The evaluation is based on the calculation of the relative level of detection (RLOD).
The level of detection at 50% (LOD_{50}) is the measured analyte concentration, obtained by a given measurement procedure, for which the probability of detection is 50%.
The relative level of detection level of detection at P = 0,50 (LOD_{50}) of the alternative method divided by the level of detection at P = 0,50 (LOD_{50}) of the reference method.

- **Inclusivity and exclusivity study**

The inclusivity study is a study involving pure target strains to be detected or enumerated by the alternative method.
The exclusivity study is a study involving pure non-target strains, which can be potentially cross-reactive, but are not expected to be detected or enumerated by the alternative method.

- **Interlaboratory study**

The interlaboratory 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.
The aim of the interlaboratory study is to determine the difference in sensitivity between the reference and the alternative method when tested by different collaborators using identical samples (reproducibility conditions).

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- **Initial validation**

Appendix A: Protocol of the alternative method
Appendix B: Protocol of the reference method
Appendix C: Artificial contaminations
Appendix D: Results of the sensitivity study
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Appendix F: Results of the selectivity study
Appendix G: Results of the interlaboratory study

- **Extension study**

Appendix H: Protocol of the alternative method
Appendix I: Protocol of the reference method
Appendix J: Artificial contaminations
Appendix K: Results of the sensitivity study
Appendix L: ISO 6887 specific preparations
Appendix M: Results of the relative level of detection study

1. Introduction

This document is a summary report gathering all the ISO 16140-2 validation studies for the NF Validation EN ISO 16140 certification of the Thermo Scientific™ Oxoid™ Listeria Precis™ detection method for *Listeria* species.

The Listeria Precis™ method for the detection of *Listeria* spp uses two enrichment protocols. A first enrichment protocol with ONE Broth which has been initially validated in June 2022, and a second enrichment protocol with 24 LEB which has been validated in October 2022 during an extension study.
The table 1 summarizes these protocols and the application scopes of the Listeria Precis™ method for the detection of *Listeria* species.

Table 1: protocols and scopes of the method

Date	Protocol	Scope
June 2022	ONE Broth Listeria - 25±3h at 30±1°C - Brilliance™ Listeria agar	Meat products Dairy products Seafood products Vegetables Environmental samples
October 2022	24 LEB Listeria - 23±3h at 37±1°C - Brilliance™ Listeria agar (ISO) new formulation	Composite foods Meat and meat products Milk and dairy products Seafood and fishery products Vegetables Environmental samples

For protocol using ONE Broth, some of the results presented in this report were produced during validation tests carried out by ASEPT in 2005 and ADRIA Développement in 2017 as part of the NF Validation certification of the Listeria Precis™ method for the detection of *Listeria monocytogenes*, in accordance with prevailing requirements. The choice and reinterpretation of the samples was carried out according to the following rules :

- priority for samples naturally contaminated (ISO 16140-2:2016 – Annex B normative)
- diversity of matrices (ISO 16140-2:2016 - § 5.1.3.1)
- maximum of 4 positive samples per type to meet AFNOR requirements (project v7) with 15 to 25 *Listeria* spp alone or in a mixture per category.

In total, 159 samples analyzed in 2005 by ASEPT or in 2017 by ADRIA Développement were reinterpreted (positive and negative results) from the Listeria Precis™ validation study for the detection of *Listeria monocytogenes*. Laboratory MICROSEPT analyzed 174 samples in 2022 to complete the number of *Listeria* species samples.

2. Protocol of the methods

2.1. Alternative method

2.1.1. Principle of the alternative method

The Listeria Precis™ method is based on a selective enrichment step followed by a streaking onto a selective agar media: Thermo Scientific™ Oxoid™ *Brilliance™* Listeria Agar.

2.1.2. Protocols of the alternative method

The validated protocols are as follows:

- **Protocol using ONE Broth *Listeria***

- Enrichment step in Thermo Scientific™ Oxoid™ ONE Broth Listeria for 25±3 h at 30±1°C
- Streaking 10 µl of enrichment onto *Brilliance*™ Listeria Agar:
  - Incubation for 24 h ± 2 h at 37°C ± 1°C for all the products, except meat products,
  - Incubation for 24 h ± 2 h to 48 h ± 2 h at 37°C ± 1°C for meat products.
- Confirmation of the typical colonies:
  - MicroBact 12L micro-gallery (or equivalent),
  - Using the tests described in the reference method after a purification step,
  - SureTect Listeria species PCR Assay (or equivalent) as described for the use of validated molecular hybridization in the ISO 7218 standard,
  - An appropriate ISO 16140-6 validated method.

- **Protocol using 24 LEB *Listeria* (extension in 2022)**

- Enrichment step in Thermo Scientific™ Oxoid™ 24 LEB for 23±3 h at 37±1°C
  It is possible to store the enrichment broths for 72h at 2-8°C before streaking.
- Streaking 10 µl of enrichment onto Thermo Scientific™ Oxoid™ Brilliance™ *Listeria* Agar (ISO) new formulation using a basic loop and no pipetting at all:
  - Incubation for 24 h ± 2 h at 37°C ± 1°C for all the products,
  - It is possible to store the plates for 72h at 2-8°C before reading.
- Confirm using one of the following options:
  - In the context of NF Validation:
    - Thermo Scientific™ PrecisCheck™ lateral flow *Listeria* species test to get the result in the next quarter,
    - A spot on Palcam,
    - Microgalleries (e.g. Oxoid™ Microbact™ 12L biochemical galleries),
    - The tests described in the ISO 11290-1:2017 reference method after a purification step,
    - Molecular hybridization methods (Isothermal or PCR) validated according to the ISO 16140-2:2016 standard and the NF Validation technical rules (for instance, SureTect™ *Listeria* species PCR Assay (Cat. No. PT0200A) and SureTect™ *Listeria monocytogenes* PCR Assay (Cat. No. PT0300A), respectively NF VALIDATION™ certificate UNI 03/08-11/13 and NF VALIDATION™ certificate UNI 03/09-11/13)

- In the context of ISO general rules:
  - An appropriate ISO 16140-6 validated method,
  - The tests described in the ISO 11290-1 reference method after a purification step,
  - Molecular hybridization as described in ISO 7218 using, for instance, SureTect™ Listeria species PCR Assay (Cat. No. PT0200A) and SureTect™ *Listeria monocytogenes* PCR Assay (Cat. No. PT0300A), that are validated according to the ISO 16140-2 standard (respectively NF VALIDATION™ certificate UNI 03/08-11/13 and NF VALIDATION™ certificate UNI 03/09-11/13).

The workflows of the method are described in Appendix A and in Appendix H.

2.1.3. Scopes of the alternative method

The scope of this method relates to four categories of human foods products and to environmental samples for ONE Broth protocol and all human food products and environmental samples by a validation testing of a broad range of foods for the 24 LEB protocol.

- **Scope for the protocol using ONE Broth *Listeria*:**
  - meat and meat products (25 g),
  - milk and dairy products (25 g),
  - fish and seafood products (25 g),
  - vegetables (25 g),
  - environmental samples (25 g or 25 ml or surface sampling)

- **Scope for the protocol using 24 LEB *Listeria* (extension in 2022)**:
  - composite foods (25 g),
  - meat and meat products (25 g)
  - milk and dairy products (25 g)
  - seafood & fish products (25 g)
  - vegetables (25 g)
  - production environmental samples (25 g or 25 ml or surface sampling)

2.2. Reference method

Assays of 2005 were performed according to the ISO 11290-1:1997 standard “Microbiology of food and animal feeding stuffs - Horizontal method for the detection and enumeration of *Listeria monocytogenes* – Part 1: detection method”.
This standard was updated in 2017, that’s why the method described in the new standard ISO 11290-1:2017 “Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp – Part 1: detection method” was considered as the reference method as part of the extension study.

The analytical scheme of the reference method is presented in Appendix B and I.

2.3. Restriction

The Egg products are excluded from the application scope of the method for the protocol using ONE Broth.

2.4. Study design

As there is no shared enrichment step for both the alternative and the reference methods, different test portions coming from the same batch or lot of products have to be used for the two methods. The study thus provides unpaired data and the word “unpaired study” is used to describe the study design.

3. Initial validation study (ONE Broth protocol)

The study was conducted on a variety of samples and strains representative of food products. This is not an exhaustive list of the various matrices included in the application scope. For any remark on the alternative method, you can contact AFNOR Certification by connecting to the Internet page ***http://nf-validation.afnor.org/contact-2/***.

3.1. Method comparison study

3.1.1. Sensitivity study

3.1.1.1. Number and nature of samples

159 samples contaminated with *Listeria monocytogenes* were analyzed in 2005 by ASEPT or in 2017 by ADRIA Développement and reinterpreted.
174 samples were analyzed by Microsept in order to complete the different categories.
The distribution of samples per category and type are presented in table 2.

Table 2: Number and nature of samples analyzed for all categories ([1] : positive by any method)

Category	Type		Number of positive results[1]	Number of negative results	Total
Meat products ❶	a	Raw	11	10	21
	b	Ready-to-cook	11	9	20
	c	Ready-to-eat, ready-to reheat	8	16	24
	Total		**30**	**35**	**65**
Dairy products ❷	a	Raw milk cheeses	10	10	20
	b	Raw milk	11	9	20
	c	Pasteurized cheese	13	11	24
	Total		**34**	**30**	**64**
Seafood products ❸	a	Raw	8	15	23
	b	Smoked	11	11	22
	c	RTE	11	13	24
	Total		**30**	**39**	**69**
Vegetables ❹	a	Raw materials	9	12	21
	b	Processed raw	10	14	24
	c	Cooked or frozen	13	15	28
	Total		**32**	**41**	**73**
Environmental samples ❺	a	Process and cleaning water	10	12	22
	b	Surface	10	10	20
	c	Dusts	12	8	20
		Total	**32**	**30**	**62**
TOTAL			**158**	**175**	**333**

3.1.1.2. Artificial contamination of samples

Artificial contamination was carried out using stressed strains in accordance with the requirements of the validation standard and the AFNOR technical rules.

For spiking, strains were stressed using different treatments and the stress intensity was evaluated. For seeding, bacterial suspensions were enumerated and inoculated in the matrices. The samples so contaminated were stored at 2 – 8°C for 48 to 72 hours (see Appendix C).

The distribution of the positive samples per contamination (natural and artificial) and per protocol is given in table 3.

Table 3: Distribution of the positive natural and artificial contaminated samples

		Positive samples								
		Naturally contaminated	Cross-contamination	Spiking (CFU/sample)			Seeding (CFU/sample)			Total
				<5 CFU	5<x<10	>10 CFU	<3 CFU	3<x<10	>10 CFU	
ONE Broth	Samples number	88	1	10	2	0	57	0	0	**158**
	Percentage	55.7%	0.6%	6.3%	1.3%	0%	36.1%	0%	0%	100%

In total, 88 positive results out of 158 were obtained following naturally contaminations, i.e. 55.7 %.

Table 4 presents the distribution of positive samples contaminated by: *Listeria monocytogenes*, *Listeria* spp excluding *monocytogenes* and a mixture of *L. monocytogenes* + *Listeria* spp excluding *L. monocytogenes*.

Table 4: distribution of the positive samples per Listeria species.

Category	***Listeria spp* only**		***Listeria spp* + *L. monocytogenes***		**TOTAL**		***L. monocytogenes* only**		**Total positive samples**
	Number	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**	
❶	19	63.3	0	0	19	63.3	11	36.7	30
❷	22	64.7	0	0	22	64.7	12	35.3	34
❸	18	60.0	0	0	18	60.0	12	40.0	30
❹	20	62.5	0	0	20	62.5	12	37.5	32
❺	16	50.0	0	0	16	50.0	16	50.0	32
All	**95**	**60.1**	**0**	**0**	**95**	**60.1**	**63**	**39.9**	**158**

The distribution of the Listeria is compliant for each category with the "*Requirements regarding comparison and interlaboratory studies for implementation of the standard EN ISO 16140-2*", revision

7: a proportion of at least 15 to 25 *Listeria spp* contaminated samples (alone or combined with *Listeria monocytogenes*) is tested for each category.

3.1.1.3. Incubation conditions

No information was provided for the tests carried out by ASEPT in 2005 concerning the incubation time applied, i.e. the minimum, central or maximum incubation time. There was no specific requirement at that time.

For samples analyzed by ADRIA Développement in 2017 and by Microsept in 2022, the minimum incubation time was applied:

- Enrichment in ONE Broth Listeria: 22 h at 30°C
- Brilliance™ Listeria Agar plate: 22 h at 37°C

3.1.1.4. Confirmation protocols

The positive samples were confirmed:

- by the tests described in the reference method after purification on one or two typical colonies observed on Brilliance™ Listeria Agar for samples analyzed in 2005,

- by the tests described in the reference method after purification step for samples analyzed in 2017,

- by the tests described in the reference method after purification on one or two typical colonies observed on Brilliance™ Listeria Agar and by a micro-gallery of identification (Microbact 12L) without purification for samples analyzed in 2022.

All confirmations were made after 22 hours of incubation of the Brilliance™, except for samples n°2247838, 2247839, 2247840, 2247841 and 2247842 where the colony size was not sufficient to perform the micro- identification gallery. The plates were re-incubated before carrying out the confirmation.

3.1.1.5. Results

Raw data are shown in Appendix D.

Table 5 shows the results for the two methods.

Table 5: results of the sensitivity study for both methods (R+/-: reference method positive or negative, A+/-: alternative method positive or negative, PA: positive agreement, NA: negative agreement, ND: negative deviation, PD: positive deviation, PP: presumptive positive before confirmation)

Category	Response	R+	R-
Meat products ❶	A+	PA = 22	PD = 4
	A-	ND = 4 and 0 PPND	NA = 35 and 0 PPNA
Dairy products ❷	A+	PA = 30	PD = 1
	A-	ND = 3 and 0 PPND	NA = 30 and 0 PPNA
Seafood products ❸	A+	PA = 24	PD = 2
	A-	ND = 4 and 0 PPND	NA = 39 and 0 PPNA
Vegetables ❹	A+	PA = 25	PD = 3
	A-	ND = 4 and 0 PPND	NA = 41 and 0 PPNA
Environmental samples ❺	A+	PA = 32	PD = 0
	A-	ND = 0 and 0 PPND	NA = 30 and 0 PPNA
All categories	A+	**PA = 133**	**PD = 10**
	A-	**ND = 15 and 0 PPND**	**NA = 175 and 0 PPNA**

3.1.1.6. Calculation of relative accuracy (AC), relative sensitivity (SE) and false positive ratio (FP)

All results were used to calculate the sensitivity for the alternative method and the reference method, the relative trueness and the false positive ratio.

Table 6 presents the results.

Table 6: values in % of sensitivity for the two methods, relative trueness and false positive ratio for the alternative method (SE_{alt}: sensitivity for the alternative method, SE_{ref}: sensitivity for the reference method, RT: relative trueness, FPR: false positive ratio for the alternative method)

Category	Type		PA	NA	PD	ND	PPND	PPNA	SE alt %	SE ref %	RT %	FP %
❶ Meat products	a	Raw	7	10	2	2	0	0	81.8	81.8	81.0	0.0
	b	Ready-to-cook	8	9	1	2	0	0	81.8	90.9	85.0	0.0
	c	Ready-to-eat, ready-to reheat	7	16	1	0	0	0	100.0	87.5	95.8	0.0
	Total		**22**	**35**	**4**	**4**	**0**	**0**	**86.7**	**86.7**	**87.7**	**0.0**
❷ Dairy products	a	Raw milk cheeses	9	10	0	1	0	0	90.0	100.0	95.0	0.0
	b	Raw milk	11	9	0	0	0	0	100.0	100.0	100.0	0.0
	c	Pasteurized cheese	10	11	1	2	0	0	84.6	92.3	87.5	0.0
	Total		**30**	**30**	**1**	**3**	**0**	**0**	**91.2**	**97.1**	**93.8**	**0.0**
❸ Seafood products	a	Raw	7	15	1	0	0	0	100.0	87.5	95.7	0.0
	b	Smoked	9	11	0	2	0	0	81.8	100.0	90.9	0.0
	c	Ready-to-eat	8	13	1	2	0	0	81.8	90.9	87.5	0.0
	Total		**24**	**39**	**2**	**4**	**0**	**0**	**86.7**	**93.3**	**91.3**	**0.0**
❹ Vegetables	a	Raw materials	7	12	1	1	0	0	88.9	88.9	90.5	0.0
	b	Processed raw	9	14	0	1	0	0	90.0	100.0	95.8	0.0
	c	Cooked or frozen	9	15	2	2	0	0	84.6	84.6	85.7	0.0
	Total		**25**	**41**	**3**	**4**	**0**	**0**	**87.5**	**90.6**	**90.4**	**0.0**
❺ Environmental samples	a	Process and cleaning water	10	12	0	0	0	0	100.0	100.0	100.0	0.0
	b	Surface	10	10	0	0	0	0	100.0	100.0	100.0	0.0
	c	Dusts	12	8	0	0	0	0	100.0	100.0	100.0	0.0
	Total		**32**	**30**	**0**	**0**	**0**	**0**	**100.0**	**100.0**	**100.0**	**0.0**
All categories			**133**	**175**	**10**	**15**	**0**	**0**	**90.5**	**93.7**	**92.5**	**0.0**

Table 7 summarizes the calculated parameters for all categories: sensitivities, relative trueness and false positive ratio.

Table 7: parameters for all categories per kind of samples (ND=ND+PPND, NA=NA+PPNA)

Parameter	Formula EN ISO 16140-2 :2016	ONE Broth
Sensitivity of the alternative method (SE_{alt})	$SE_{alt} = \frac{(PA + PD)}{(PA + ND + PD)} \times 100\ \%$	**90.5 %**
Sensitivity of the reference method (SE_{ref})	$SE_{ref} = \frac{(PA + ND)}{(PA + ND + PD)} \times 100\ \%$	**93.7 %**
Relative trueness (RT)	$RT = \frac{(PA + NA)}{N} \times 100\ \%$	**92.5 %**
False positive ratio (FPR) False positive results are the sum of PPNA and PPND	$FPR = \frac{FP}{NA} \times 100\ \%$	**0.0 %**

3.1.1.7. Analysis of discordant results

The negative deviations (19) are given in table 8 and the positive deviations (13) in table 9.
The negative deviations relate to 11 naturally contaminated samples and 4 artificially contaminated samples.

10 positive deviations were observed and 7 relate to naturally contaminated samples.

Table 8: Negative deviations

Cat.	Type	Sample N°	Product	Half Fraser (24h - 30°C) - ISO method						ONE BROTH (22h - 30°C)					
				AL	Palcam	Fraser tube		Conf.	Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO conf.	Result	Agree-ment
						AL	Palcam								
1	a+	2231970	Cutlet Milanese	∅	∅	BM ø halo	BM	*L.welshimeri*	P	∅	∅	/	/	A	ND
	a+	2231978	Duck liver	AL ø halo	BL	AM ø halo	AM	*L.innocua*	P	∅	∅	/	/	A	ND
	b+	2231961	Ground pork meat	∅	∅	AM ø halo	AM	*L.innocua*	P	∅	∅	/	/	A	ND
	b+	2231981	Ground pork meat	∅	∅	AL ø halo	AL	*L.welshimeri*	P	∅	∅	/	/	A	ND
2	a+	2236690	Raw cow's milk cheese (Abondance)	AM ø halo	AM	AM ø halo	AM	*L.innocua*	P	∅	/	/	/	A	ND
	c+	2236696	Pasteurized cow's milk cheese (Baskeria)	AL ø halo	CL	AM ø halo	AM	*L.innocua*	P	∅	/	/	/	A	ND
	c+	2247810	Pasteurized cow's milk cheese (Fol Epi)	AL halo	∅	AL halo	∅	*L.ivanovii*	P	∅	/	/	/	A	ND
3	b+	2247775	Smoked mackerel	EM	EM	AM ø halo	AM	*L.innocua*	P	∅	/	/	/	A	ND
	b+	2247915	Smoked salmon	AL ø halo	AL	AL ø halo	AL	*L.innocua*	P	∅	/	/	/	A	ND
	c+	2247780	Shrimp shell	EM	EM	AM ø halo	AM	*L.welshimeri*	P	∅	/	/	/	A	ND
	c+	2247781	Surimi shell	EM	∅	AM ø halo	AM	*L.welshimeri*	P	∅	/	/	/	A	ND
4	a+	2247921	Apple	AM ø halo	AM	AM ø halo	AM	*L.innocua*	P	∅	/	/	/	A	ND
	b+	2247784	Onions	AM ø halo	AM	AM ø halo	AM	*L.innocua*	P	∅	/	/	/	A	ND
	c+	2247835	Gratted carot	∅	∅	AL ø halo	∅	*L. seeligeri*	P	∅	/	/	/	A	ND
	c+	2247837	Piemontaise	∅	∅	AL ø halo	∅	*L. seeligeri*	P	EL	/	/	/	A	ND

Table 9: Positive deviations

Category	Type	Sample N°	Product	Half Fraser (24h - 30°C) - ISO method							ONE BROTH (22h - 30°C)					
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO conf.	Result	Agree-ment
						AL	Palcam									
1	a+	2231966	Pork meat	∅	∅	∅	∅	/	/	A	Al ø halo	∅	*L.welshimeri*	*L.welshimeri*	P	PD
	a+	2231979	Pork meat	∅	EL	∅	EL	/	/	A	AM ø halo	AM ø halo	*L.welshimeri*	*L.welshimeri*	P	PD
	b+	2231972	Raw sausage	∅	∅	∅	∅	/	/	A	Al ø halo	∅	*L.welshimeri*	*L.welshimeri*	P	PD
	c+	2236689	Boudin noir	∅	EL	∅	EL	/	/	A	AL ø halo	AL ø halo	*L.welshimeri*	*L.welshimeri*	P	PD
3	c+	2247808	Pasteurized cow's milk cheese (Tomme)	EM	∅	EM	∅	/	/	A	AL halo	/	*L.ivanovii*	*L.ivanovii*	P	PD
4	a+	2247771	Plaice	EL	∅	∅	∅	/	/	A	AL ø halo	/	*L.innocua*	*L.innocua*	P	PD
	c+	2247919	Prawn salad	ø	EL	ø	EL	/	/	A	AM ø halo	/	*L.innocua*	*L.innocua*	P	PD
5	a+	4801	Corn	-	-	st	-	/		A	H+	/	-	*L.mono*	P	PD
	c+	2247931	Vegetables	∅	∅	∅	∅	/	/	A	DL ø halo (1)	/	*L.innocua*	*L.innocua*	P	PD
	c+	2247840	Tabouleh	∅	∅	∅	∅	/	/	A	AL ø halo*	AL ø halo	*L. seeligeri*	*L. seeligeri*	P	PD

Most of the discordant results are probably due to the fact that it is an unpaired study.
Note that for nine samples, typical colonies were obtained only with the reference method after streaking from Fraser broth. These samples were probably contaminated at a low level.

The additional tests carried out according to ISO 16140-2 on samples in negative deviation didn't allow recovering Listeria colonies.

3.1.1.8. Calculation and interpretation of data

For each category and for all categories, the difference between ND and PD is calculated. The values obtained are compared to the acceptability limits defined by the EN ISO 16140-2:2016 standard.

Table 10 shows these results.

Table 10: acceptability limits for ONE Broth protocol

Cate-gory	Type		Values				
			PD	ND	PPND	ND+PPND-PD	AL
❶	a	Raw	2	2	0	/	/
	b	Ready-to-cook	1	2	0		
	c	Ready-to-eat, ready-to reheat	1	0	0		
	Total		**4**	**4**	**0**	**0**	**3**
❷	a	Raw milk cheeses	0	1	0	/	/
	b	Raw milk	0	0	0		
	c	Pasteurized cheese	1	2	0		
	Total		**1**	**3**	**0**	**2**	**3**
❸	a	Raw products (fresh, frozen)	1	0	0	/	/
	b	Smoked, marinated	0	2	0		
	c	Ready to eat or ready to reheat	1	2	0		
	Total		**2**	**4**	**0**	**2**	**3**
❹	a	Raw materials	1	1	0	/	/
	b	Processed raw	0	1	0		
	c	Cooked or frozen	2	2	0		
	Total		**3**	**4**	**0**	**1**	**3**
❺	a	Process and cleaning water	0	0	0	/	/
	b	Surface	0	0	0		
	c	Dusts	0	0	0		
	Total		**0**	**0**	**0**	**0**	**3**
Total			**10**	**15**	**0**	**5**	**5**

The observed values are below the acceptability limits for each category and equal to the acceptability limit for the combined categories.

The alternative method produces results comparable to the reference method.

3.1.1.9. Confirmations

For samples analyzed by ASEPT in 2005 and contaminated with *Listeria monocytogenes,* all the positive samples obtained were confirmed by the tests described in the reference method.

For samples analyzed by ADRIA Développement in 2017 and contaminated with *Listeria monocytogenes,* all the positive samples obtained were confirmed by the tests described in the reference method.

For samples analyzed by Microsept in 2022, all the positive samples obtained were confirmed by the tests described in the reference method and using a biochemical micro-gallery (Microbact™ 12L).

Note that according to the ISO 16140-2:2016 standard, all negative samples must be confirmed by the reference method including the sub-culture in Fraser. This was applied for samples analyzed in 2017 and 2022.
For two negative samples, 2247799 and 2247811, a positive result was obtained after isolation of the Fraser enrichment on *Brilliance*™ Listeria Agar.

3.1.1.10. Enrichment broth storage at 5±3°C for 72h:

A storage at 5°C was tested only for samples analyzed in 2022. The broth was re-isolated on Brilliance™ *Listeria* for samples that gave a positive or discordant result and confirmed with a micro-gallery of identification.
One sample (2247915 : smoked salmon) moved from negative deviation to positive agreement.

Since broth storage was not carried out for all studies (only for samples analyzed in 2022), the statistical interpretation is not carried out.

3.1.1.11. Conservation of the Brilliance™ *Listeria* plates at 5±3°C for 72h:

The Brilliance™ *Listeria* agar plates were stored for 72 h at 5±3°C and read again only for samples analyzed in 2022. The characteristic colonies are confirmed again with a micro-gallery of identification. No change was observed after storage of the Brilliance™ *Listeria* agar plates.

Since plates storage was not carried out for all studies (only for samples analyzed in 2022), the statistical interpretation is not carried out.

3.1.2. Relative level of detection study

3.1.2.1. Experimental design

Five matrix-strain pairs were analyzed by the reference method and by the alternative method.

For two categories (Dairy products and Vegetables), the data generated during the validation of the *Listeria* Precis™ method for detection of *Listeria monocytogenes* in 2005 were reinterpreted.

For the remaining three categories (Meat products, Seafood products and Environmental samples), new tests were carried out by Microsept in 2022.

Table 11: Matrix-strain pairs used for the determination of the RLOD

Matrix	Strain	Origin
❶ *Meat products:* **Rillettes**	*Listeria ivanovii* AAZ671	Raw meat
❷ *Dairy products:* **Raw milk**	*Listeria monocytogenes* 18 1/2b	Raw milk
❸ *Seafood products:* **Smoked salmon**	*Listeria innocua* ABB472	Marinated salmon
❹ *Vegetables:* **Lettuce**	*Listeria monocytogenes* 1 1/2a	Deli salad
❺ *Environmental samples:* **Process water**	*Listeria welshimeri* RVG428	Environment

For categories ❷ and ❹, six replicates were analyzed per inoculation level and a minimum of 4 inoculation levels were tested.

For categories ❶, ❸ and ❺, three levels of contamination were prepared consisting of a negative control level, a low level, and a higher level. Only one strain of the target analyte is used to contaminate the low and the high level.

The negative control level shall not produce positive results. Five replicates are tested for this level.

The low level shall be the theoretical detection level, it has been contaminated at 0.7 - 1 CFU per test portion to obtain fractional recovery results. Twenty replicates are tested for this level.

The higher level shall be just above the theoretical detection level, it has been contaminated at 2 - 3 CFU per test portion. Five replicates are tested for this level.

Food products were contaminated using the seeding protocol. Bulk contaminations were performed on the matrices for the different levels of contamination, then the matrices were stored at 5±3°C for two days before analysis. Samples were then analyzed by the reference and the alternative method. For the alternative method, only the minimal incubation time of the broth of the alternative method was tested.

Simultaneously, a total viable count was performed on a portion of non-contaminated matrix to estimate the concentration of mesophilic aerobic flora. A detection of *Listeria* spp using the reference method was also performed to check the absence of the target analyte in the matrix.

3.1.2.2. Results and calculation of the RLODs

Raw results are shown in Appendix F. The RLOD is defined as the ratio of the LODs of the alternative method and the reference method: RLOD= LOD_{alt} / LOD_{ref}.

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 06.07.2015.

The RLODs are given in table 12.

Table 12: RLODs values (RLOD: the estimated relative level of detection value, RLODU: the upper limit of the 95% confidence interval for RLOD, RLODL: the lower limit of the 95% confidence interval for RLOD, b=ln(RLOD): logarithm of the RLOD value, sd(b): standard deviation of b, z-Test statistic: absolute value of the test statistic of the z-Test with the null hypothesis H0: b=0, p-value: p-value of the z-Test)

Name	RLOD	RLODL	RLODU	b=ln(RLOD)	sd(b)	z-Test statistic	p-value	AL
❶ Rillettes / *Listeria ivanovii* AAZ671	**0.560**	0.249	1.259	-0.579	0.405	1.431	1.848	
❷ Raw milk / *Listeria monocytogenes* 18 (1/2 b)	**1.670**	0.350	7.969	0.513	0.781	0.656	0.512	
❸ Smoked salmon / *Listeria innocua* ABB472	**1.563**	0.607	4.025	0.447	0.473	0.945	0.345	**2.5**
❹ Lettuce / *Listeria monocytogenes* 1 (1/2a)	**1.229**	0.397	3.806	0.206	0.565	0.364	0.716	
❺ Process water / *Listeria welshimeri* RVG428	**1.133**	0.510	2.521	0.125	0.400	0.313	0.754	
Combined	**1.000**	0.673	1.485	0.000	0.198	0.000	1.000	

The LOD_{50} calculations according to Wilrich & Wilrich POD-LOD calculation program - version 10, are given in table 13.

Table 13: $LOD_{50\%}$ for the alternative and reference method

Matrix	Strain	$LOD_{50\%}$(CFU/25g) alternative method	$LOD_{50\%}$(CFU/25g) Reference method
❶ Rillettes	*Listeria ivanovii* AAZ671	0.415	0.804
❷ Raw milk	*Listeria monocytogenes* 18 (1/2b)	0.635	0.506
❸ Smoked salmon	*Listeria innocua* ABB472	0.772	1.121
❹ Lettuce	*Listeria monocytogenes* 1 (1/2a)	0.636	0.534
❺ Process water	*Listeria welshimeri* RVG428	1.185	1.069
Combined results		**0.737**	**0.882**

3.1.2.3. Interpretation and conclusion

The RLOD values are below the limit of acceptability set at 2.5 for Listeria Precis™ method.

In conclusion, alternative and reference methods show similar LODs values for the detection of *Listeria* spp in the categories tested.

3.1.3. Inclusivity and exclusivity study

3.1.3.1. Test protocols

50 *Listeria* spp strains and 38 non-target strains were tested by the *Listeria* Precis™ method and by the reference method.

- **Inclusivity**

The data from 20 *Listeria monocytogenes* strains analyzed in the validation of Listeria Precis™ method for the detection of *Listeria monocytogenes* in 2007 were reinterpreted and 31 other strains of *Listeria* spp were added in 2022.

All *Listeria* cultures were performed in tryptone-soya broth (24 h at 37°C). Dilutions were done in order to inoculate 1 to 100 cells/225 ml ONE Broth Listeria. The complete protocol of the alternative method was applied.

- **Exclusivity**

The data from 37 non target strains analyzed in the validation of Listeria Precis™ method for detection of *Listeria monocytogenes* in 2007 were reinterpreted.

All the cultures were performed in tryptone-soy broth (24 h at 37°C). Dilutions were done in order to inoculate 10^5 cells/ml ONE Broth Listeria. The complete protocol of the alternative method was applied.

3.1.3.2. Results

Raw data are given in Appendix F.

- **Inclusivity**

The 50 strains of *Listeria* analyzed gave a positive result. However, for the 4 strains of *Listeria grayi*, the addition of powdered milk to the enrichment broth was necessary to allow their growth.
For the strain of *Listeria grayi* RZK366, this addition of powdered milk did not make it possible to obtain growth with the reference method.
Listeria ivanovii gave colonies with a halo on *Brilliance*™ Listeria Agar, but the confirmation tests provided a clear discrimination between *Listeria monocytogenes* and *Listeria ivanovii* species.

- **Exclusivity**

No cross-reaction was observed with the non-target strains.

3.1.3.3. Conclusion

The selectivity of the method is satisfactory

3.1.4. Practicability

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

- **Storage conditions, shelf-life and modalities of utilization after first use**

The shelf-life and the storage conditions are given on the package. All reagents must be stored at the temperature mentioned on the package.

- **Common step with the reference method**

No common step with the reference method.

- **Time-to-result**

See table below:

Table 14: Time-to-result

Steps	Reference method	Alternative method
Negative samples		
Sampling (Half Fraser or ONE Broth *Listeria*)	Day 0	Day 0
Fraser 1	Day 1	/
Half Fraser streaking (O1 – P1)	Day 1	/
Streaking onto *Brilliance*^{TM} Listeria Agar	/	Day 1
Fraser 1 streaking (O2 – P2)	Day 3	/
Reading plates (O1 – P1 & *Brilliance*^{TM} Listeria Agar)	Day 2 – Day 3	Day 2 – Day 3 (meat products)
Reading plates (O2 – P2)	Day 4 – Day 5	/
Presumptive positive or positive results		
Sub-culture of typical colonies from O1/P1 on TSAYE	Day 2 – Day 3	/
subculture of typical colonies from O2/P2 on TSAYE	Day 4 – Day 5	/
Results	Day 4 – Day 7 Day 8 – Day 11 (1)	Day 2 – Day 4

(1) In the case of the Rhamnose and xylose tests are realized in tubes.

3.2. Interlaboratory study

3.2.1. Organization of the study

This study was realized in June 2009 by ADRIA Développement: 13 packages were delivered but only 12 laboratories participated to the ring trial (one lab (D) received its package at Day 2).

Pasteurized milk was used to perform the study. The samples were inoculated with *Listeria monocytogenes* strain serovar 4b 153, 16 flasks were individually inoculated per lab and per contamination level. Each lab received 48 samples to analyze.

3.2.2. Experimental parameters controls

3.2.2.1. Sample stability

- Contamination levels before inoculation

In order to detect *Listeria monocytogenes*, the ISO 11290-1/A1 method was performed on milk test portions (25 g) before the inoculation. All the results were negative.

Table 15: target and real contamination levels (CFU/25 g)

Level	Samples	Theoretical target level	True level	Low limit	High limit
Level 0 L_0	2-5-8-12-13-16-22-24	0	/	/	/
Low level L_1	3-6-10-11-14-18-21-23	5	5	4.3	5.8
High level L_2	1-4-7-9-15-17-19-20	25	25.2	21.8	29.9

- Strain stability during transport

In order to detect *Listeria monocytogenes*, the ISO 11290-1/A1 method was performed on milk test portions (25 g) before the inoculation. All the results were negative. Sample stability was checked by inoculating the matrix at a low level (1 – 10 CFU/25 ml) and a high level (5 – 50 CFU/25 ml). Enumerations were performed for the high contamination level and detection analyses were performed for the low contamination level. Triplicates were analyzed with reference method for the detection and O&A agar media for enumeration. The results were the following: (See table 16).

Table 16: Listeria monocytogenes stability in the matrix

Day of analysis	***Listeria monocytogenes* detection**	
	CFU/ml (O&A)	Detection/25 ml
Day 0	67	+
	46	+
	29	+
Day 1	38	+
	54	+
	25	+

No evolution was observed during storage.

3.2.2.2. Logistic conditions

The temperatures measured at reception by the Labs, the temperatures registered by the thermo-probe, and the receipt dates are given in Table 17.

Table 17: samples temperature upon receipt (T°C: temperature in °C)

Laboratories	Probe T°C	Receipt T°C	Receipt date and time		Analysis date
A	4.0	5.2	Day 1	11h45	Day 1
B	1.5	3.8	Day 1	11h40	Day 1
C	3.0	5.1	Day 1	14h00	Day 1
D	3.0	*Non measured*	Day 2	10h15	*Not realized*
E	1.5	3.6	Day 1	16h00	Day 1
F	4.0	*Non measured*	Day 1	10h30	Day 1
G	1.5	5.2	Day 1	11h10	Day 1
H	3.0	6.4	Day 1	14h25	Day 1
I	2.5	4.2	Day 1	12h00	Day 1
J	2.5	4.0	Day 1	14h00	Day 1
K	7.0	12.0	Day 1	12h00	Day 1
L	3.0	7.0	Day 1	10h24	Day 1
M	3.0	6.3	Day 1	13h34	Day 1

One Lab (D) received the samples at Day 2.
One Lab (K) measured a temperature at receipt above 8.4°C, but the sensor indicated clearly that the temperature was fitting with the AFNOR technical rules.

3.2.3. Results

The raw data are given in Appendix H.

3.2.3.1. Results obtained by the Expert Laboratory

The results obtained by the Expert Laboratory are the following (see table 18).

Table 18: Results obtained by the Expert Laboratory

Level	Reference method	Alternative method
L_0	0 / 8	0 / 8
L_1	8 / 8	8 / 8
L_2	8 / 8	8 / 8

3.2.3.2. Results obtained by the collaborators

- **Mesophilic aerobic flora**

The enumeration of the mesophilic aerobic flora varies from $7.7x10^2$ to $1.8x10^4$ CFU/ml.

- ***Listeria monocytogenes* detection**

Table 19 present the positive results of all collaborators.

Table 19: positive results of the collaborators (bc: before confirmation, ac: after confirmation)

Lab	Reference method			Alternative method					
	L_0	L_1	L_2	L_0		L_1		L_2	
				bc	ac	bc	ac	bc	ac
A	0	8	8	0	0	8	8	8	8
B	0	8	8	0	0	8	8	8	8
C	0	8	8	0	0	8	8	8	8
E	0	7	8	0	0	8	8	8	8
F	0	8	8	0	0	8	8	8	8
G	0	8	8	0	0	8	8	8	8
H	0	8	8	0	0	8	8	8	8
I	0	8	8	0	0	8	8	8	8
J	0	8	8	0	0	8	8	8	8
K	0	8	8	0	0	8	8	8	8
L	0	8	8	0	0	8	8	8	8
M	0	8	8	0	0	8	8	8	8
Total	**0**	**95**	**96**	**0**	**0**	**96**	**96**	**96**	**96**

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 this study, the results from all the Labs were kept for interpretation.

3.2.4. Interpretation of the results

3.2.4.1. Calculation of the specificity percentage (SP)

The percentage specificity (SP) of the reference method and the alternative method is calculated, using the data after confirmation, based on the results of level L0 as follows:

Specificity of the reference method: $SP_{ref} = \left[1 - \left(\frac{P_0}{N-}\right)\right] \times 100\%$

Specificity of the alternative method: : $SP_{alt} = \left[1 - \left(\frac{CP_0}{N-}\right)\right] \times 100\%$

where:

N- is the number of all L_0 tests,

P0 is the total number of false-positive results obtained with the blank samples before confirmation,

CP_0 is the total number of false-positive results obtained with blank samples.

The results are the following:

SP_{ref} = 100%

SP_{alt} = 100%

3.2.5. Summary of the results

Table 20 details the results of level 1 per method obtained during the study.

Table 20: tests results for the two methods

Response	Reference method positive (R+)	Reference method negative (R-)
Alternative method positive (A+)	Positive agreement PA = 95	Positive deviation PD = 1
Alternative method negative (A-)	Negative deviation ND = 0 including 0 PPND	Negative agreement NA = 0 including 0 PPNA

For an unpaired study design, the difference between (ND – PD) for the level where fractional recovery was obtained (L_1 and possibly L_2) is calculated.
The observed value found for (ND – PD) shall not be higher than the acceptability limit (AL). The AL is defined as $[(ND - PD)_{max}]$ and calculated per level where fractional recovery was 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 laboratories.
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 laboratories.
N_x = number of samples tested at level x (L_1 or L_2) with the alternative method by all laboratories.

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

N_x = the total number of samples tested for level x (L1 or L2) by all laboratories.

The AL is not met when the observed value is higher than the A*L.* 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 in case the AL is not met shall be stated in the study report.

In this study, fractional positive results are observed at level L_1 only. The different parameters obtained by the calculation are detailed in the table below:

Table 21: values obtained for the determination of the acceptability limit

Parameter	Value
N_x	96
$(p+)_{ref}$	0.99
$(p+)_{alt}$	1.00
Acceptability limit: AL = $(ND-PD)_{max}$	1.73
Observed value: ND-PD	-1

The value (ND-PD) is inferior to the acceptability limit for the two protocols, so the requirements of the standard EN ISO 16140-2:2016 are fulfilled.

3.2.6. Calculation of sensitivities, relative trueness and false positive ratio

Based on the data of table 19, the following parameters are calculated:

- Sensitivity for the alternative method: $SE_{alt} = \frac{(PA+PD)}{(PA+ND+PD)} \times 100\%$

- Sensitivity for the reference method: $SE_{ref} = \frac{(PA+ND)}{(PA+ND+PD)} \times 100\%$

- Relative trueness: $RT = \frac{(PA+NA)}{N} \times 100\%$

- False positive ratio for the alternative method: $FP = \frac{(FP)}{NA} \times 100\%$

where N is the total number of samples (NA + PA + PD + ND) and FP is false positive results.
The results are the following:

SE_{alt} = 100%
SE_{ref} = 99%
RT = 99%
FP = false positive ratio is not calculable because no negative agreement was found at level L_1.

3.2.7. Evaluation of the $LOD_{50\%}$, $LOD_{95\%}$ and RLOD

The evaluation of the RLOD between laboratories could not be determined using the Annex F of ISO 16140-2:2016 and using the Excel spreadsheet available at http://standards.iso.org/iso/16140_-RLOD_inter-lab-study_16140-2_AnnexF_ver1_28-06-2017

Calculation of $LOD_{50\%}$ and $LOD_{95\%}$ are not possible because every sample at level 1 was positive for *Listeria* Precis™ method.

3.3. Conclusion

- **Methods comparison study**

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

In the sensitivity study, four food categories and environmental samples were tested.
The protocol of the alternative method using **ONE Broth** shows 10 positive deviations (PD) and 15 negative deviations (ND). The observed values for ((ND + PPND) - PD) are below or equal to the acceptability limits for each category and for all categories.

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

The 50 strains of *Listeria* spp analyzed gave a positive result. For the 4 strains of *Listeria grayi* tested, the addition of powdered milk to the enrichment broth was necessary to allow their growth.
All the non-target strains gave a negative result.

The negative results are available in 2 or 3 days depending on the products tested and the positive results in 2 or 4 days depending on the confirmation applied.
The *Listeria* Precis™ detection method for *Listeria* species fulfils all the ISO 16140-2 and AFNOR technical rules requirements regardless of the enrichment protocol used.

- **Interlaboratory study**

The data and interpretations comply with the ISO 16140-2:2016 requirements.
The *Listeria* Precis™ method is considered equivalent to the ISO standard.

4. Extension study (24 LEB protocol)

The study was conducted on a variety of samples and strains representative of food products. This is not an exhaustive list of the various matrices included in the application scope. For any remark on the alternative method, you can contact AFNOR Certification by connecting to the Internet page ***http://nf-validation.afnor.org/contact-2/***.

4.1. Sensitivity study

4.1.1. Protocols applied during the extension study

- **Incubation times:**

The broth and alternate method agar plates were incubated at the minimum time of the tolerance interval (20 h for the broth and 22 h for the plates).

- **Confirmations:**

Presumptive positive results were confirmed by :

- PrecisCheck™ Listeria test to get a result in the next quarter,
- A spot on Palcam,
- MicroBact™ 12L micro-gallery of identification,
- The realization of the tests described in the reference method after purification.

An additional confirmation protocol was performed, as required by ISO 16140-2: 2016, consisting in sub-culturing 0.1 ml of the enriched 24LEB in a Fraser tube, incubated for 24±2 h at 37±1°C, before streaking on Palcam and a chromogenic agar media, incubated for 24±2 h at 37±1°C.

- **Cold storage of the enriched broths:**

Storage of the broths for 3 days at 5±3°C was carried out. The alternative method was applied from the stored enriched broths for positive and discordant samples. A confirmation was realized with a micro-gallery of identification.
The final results are interpreted according to ISO 16140-2: 2016, using the acceptability limits of unpaired methods.

- **Cold storage of the plates:**

The storage of the Brilliance™ Listeria Agar (ISO) media at 5±3°C for 72h was realized and a new reading and confirmation of the plates was applied.

4.1.2. Number and nature of the samples

This extension study for all categories relates to 364 samples.
Samples analyzed by category and type are presented in table 22.

Table 22: Distribution of the negative and positive samples per category and type

Category		Type		Positive	Negative	Total
❶	**Composite foods**	a	Ready-to-eat	11	10	21
		b	Ready-to-reheat	11	10	21
		c	Pastries and egg-based products	10	10	20
		Total		**32**	**30**	**62**
❷	**Meat products**	a	Raw products (frozen or fresh)	11	10	21
		b	Meat based products ready to reheat	9	11	20
		c	Raw and cooked delicatessen	10	10	20
		Total		**30**	**31**	**61**
❸	**Dairy products**	a	Raw milk cheeses	10	10	20
		b	Other products based on raw milks	10	10	20
		c	Heat treated dairy products	10	10	20
		Total		**30**	**30**	**60**
❹	**Seafood and fishery products**	a	Raw products (fresh, frozen)	10	10	20
		b	Smoked, marinated	10	10	20
		c	Ready-to-eat or ready-to-reheat	10	10	20
		Total		**30**	**30**	**60**
❺	**Vegetables**	a	Raw vegetable products (fresh, frozen)	10	11	21
		b	Mapped vegetables and heat processed vegetables	10	10	20
		c	Vegetables based preparations, processed vegetables	10	10	20
		Total		**30**	**31**	**61**
❻	**Environmental samples**	a	Process & cleaning waters	10	10	20
		b	Dusts and residues	10	10	20
		c	Surface sampling	10	10	20
		Total		**30**	**30**	**60**
All categories				**182**	**182**	**364**

4.1.3. Artificial contaminations

Artificial contamination was carried out with strains after an injury treatment, in accordance with the requirements of the validation standard and the AFNOR Validation Technical Board (see Appendix J). Table 23 gives the distribution of the positive samples per level of contamination.

Table 23: distribution of the positive samples per level (cl: contamination level)

Positive samples	Naturally contaminated samples	Artificially contaminated samples						Total
		Spiking			Seeding			
		cl ≤ 5	5 < cl ≤ 10	10 < cl ≤ 30	cl ≤ 3	3 < cl ≤ 10	cl > 10	
182	**92**	**7**	**0**	**0**	**83**	**0**	**0**	**182**
/	50.6%	3.8%	0%	0%	45.6%	0%	0%	100%

For this extension study, 50.6 % of the samples were naturally contaminated.

The proportions of *Listeria* spp (only or mixed with *L. monocytogenes*) and of *L. monocytogenes* among the positive samples for all categories are presented in table 24.

Table 24: proportions of Listeria spp and of Listeria monocytogenes among the positive samples

Category	***Listeria* spp only (A)**		***Listeria* spp + *L. monocy-togenes* (B)**		**Total A+B**		***L. monocy-togenes* only**		**Total positive samples**
	#	%	#	%	#	%	#	%	
Composite foods	15	46.8%	4	12.5%	19	59.4%	13	40.6%	32
Meat products	18	60.0%	3	10%	21	70.0%	9	30.0%	30
Milk & Dairy products	19	63.3%	1	3.3%	20	66.6%	10	33.4%	30
Seafood & Fishery products	19	63.3%	2	6.7%	21	70.0%	9	30.0%	30
Vegetables	17	56.6%	2	6.7%	19	63.3%	11	36.7%	30
Environmental samples	19	63.3%	2	6.7%	21	70%	9	30.0%	30
All	**107**	**58.8%**	**14**	**7.7%**	**121**	**66.5%**	**61**	**33.5%**	**182**

According to the *Requirements regarding comparison and interlaboratory studies for implementation of the standard EN ISO 16140-2*, v7, "for *Listeria* genus studies, compliance per category with a proportion of at least 15 to 25 *Listeria* spp contaminated samples (alone or combined with *Listeria monocytogenes*) is requested".
This requirement is fulfilled for Listeria Precis for detection of *Listeria species* for each category.

4.1.4. Results

Raw data are shown in Appendix K. Table 25 shows the results of the sensitivity study for all categories.

Table 25: results of the sensitivity study for both methods (R+/-: reference method positive or negative, A+/-: alternative method positive or negative, PA: positive agreement, NA: negative agreement, ND: negative deviation, PD: positive deviation, PP: presumptive positive before confirmation)

Category	Response	R+	R-
Composite foods ❶	A+	PA = 24	PD = 5
	A-	ND = 3 incl. 0 PPND	NA = 30 incl. 1 PPNA
Meat products ❷	A+	PA = 24	PD = 4
	A-	ND = 2 incl. 0 PPND	NA = 31 incl. 1 PPNA
Milk and Dairy products ❸	A+	PA = 23	PD = 2
	A-	ND = 5 incl. 0 PPND	NA = 30 incl. 0 PPNA
Seafood and fishery products ❹	A+	PA = 22	PD = 5
	A-	ND = 3 incl. 0 PPND	NA = 30 incl. 1 PPNA
Vegetables ❺	A+	PA = 25	PD = 4
	A-	ND = 1 incl. 0 PPND	NA = 31 incl. 0 PPNA
Production environmental samples ❻	A+	PA = 25	PD = 3
	A-	ND = 2 incl. 0 PPND	NA = 30 incl. 0 PPNA
All categories	A+	**PA = 143**	**PD = 23**
	A-	**ND = 16 incl. 0 PPND**	**NA = 182 incl. 3 PPNA**

4.1.5. Calculation of relative trueness (RT), sensitivity (SE) and false positive ratio (PFR)

The set of results obtained were used to calculate the relative trueness, the sensitivity and the false positive ratio for each of the categories and for all the categories, according to the formulas set out in the EN ISO 16140-2:2016 standard (table 26).

Table 26: Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR)

Category	Type		PA	NA	PD	ND	PPND	PPNA	SE_{alt} %	SE_{ref} %	RT %	FP %
❶ Composite foods	a	Ready-to-eat	6	10	4	1	0	0	90.9	63.6	76.2	0.0
	b	Ready-to reheat	9	10	1	1	0	0	90.9	90.9	90.5	0.0
	c	Pastries and egg-based products	9	10	0	1	0	1	90.0	100.0	95.2	10.0
	Total		**24**	**30**	**5**	**3**	**0**	**1**	**90.6**	**84.4**	**87.3**	**3.2**
❷ Meat products	a	Raw (frozen and fresh)	9	10	1	1	0	1	90.9	81.8	86.4	10.0
	b	Meat based products ready-to-reheat	9	11	0	0	0	0	100.0	100.0	100.0	0.0
	c	Raw and cooked delicatessen	6	10	3	1	0	0	90.0	70.0	80.0	0.0
	Total		**24**	**31**	**4**	**2**	**0**	**1**	**93.3**	**86.7**	**90.3**	**3.1**
❸ Dairy products	a	Raw milk cheeses	9	10	0	1	0	0	90.0	100.0	95.0	0.0
	b	Other products based on raw milks	9	10	0	1	0	0	90.0	100.0	95.0	0.0
	c	Heat treated dairy products	5	10	2	3	0	0	70.0	80.0	75.0	0.0
	Total		**23**	**30**	**2**	**5**	**0**	**0**	**83.3**	**93.3**	**88.3**	**0.0**
❹ Seafood and fishery products	a	Raw products (fresh, frozen)	8	10	2	0	0	0	100.0	80.0	90.0	0.0
	b	Smoked, marinated	8	10	0	2	0	1	80.0	100.0	90.5	10.0
	c	Ready-to-eat or ready-to-reheat	6	10	3	1	0	0	90.0	70.0	80.0	0.0
	Total		**22**	**30**	**5**	**3**	**0**	**1**	**90.0**	**83.3**	**86.9**	**3.2**
❺ Vegetables	a	Raw products (fresh, frozen)	10	11	0	0	0	0	100.0	100.0	100.0	0.0
	b	Mapped vegetables and heat processed	6	10	3	1	0	0	90.0	70.0	80.0	0.0
	c	Preparations and processed vegetables	9	10	1	0	0	0	100.0	90.0	95.0	0.0
	Total		**25**	**31**	**4**	**1**	**0**	**0**	**96.7**	**86.7**	**91.8**	**0.0**
❻ Environmental samples	a	Process and cleaning waters	9	10	1	0	0	0	100.0	90.0	95.0	0.0
	b	Dusts and residues	8	10	1	1	0	0	90.0	90.0	90.0	0.0
	c	Surface sampling	8	10	1	1	0	0	90.0	90.0	90.0	0.0
	Total		**25**	**30**	**3**	**2**	**0**	**0**	**93.3**	**90.0**	**91.7**	**0.0**
All categories			**143**	**182**	**23**	**16**	**0**	**3**	**91.2**	**87.4**	**89.4**	**1.6**

The results for all categories are summarized in the table 27 below.

Table 27: summary of the results for all categories

Parameter	Formula EN ISO 16140-2 :2016	Results for Listeria Precis method for *L.spp*
Sensitivity of the alternative method (SE_{alt})	$SE_{alt} = \frac{(PA + PD)}{(PA + ND + PD)} \times 100\ \%$	91.2 %
Sensitivity of the reference method (SE_{ref})	$SE_{ref} = \frac{(PA + ND)}{(PA + ND + PD)} \times 100\ \%$	87.4 %
Relative trueness (RT)	$RT = \frac{(PA + NA)}{N} \times 100\ \%$	89.4%
False positive ratio (FPR)	$FPR = \frac{FP}{NA} \times 100\ \%$	1.6 %

4.1.6. Analysis of discordant results

Discordant results are examined according to the standard ISO 16140-2: 2016.

The negative deviations are given in table 28 and the positive deviations in table 29.

Table 28: negative deviations

Cat	Type	#	Sample	Contamination						Reference method	Listeria Precis L.spp - 24 LEB 20h at 37°C							
				Type	Strain	Ref	Stress	Stress level	Inoc. level		Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID
1	a	2319188	Vegetables wrap	ac	*L. mono + L. seeligeri*	RJT457 ADTW22	Seeding	/	1.0 +1.2	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
1	b	2281374	Pizza vege	nc	/	/	/	/	/	P	EL	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
1	c	2247905	Pastry "Flan"	ac	*L.innocua*	RXJ222	Seeding	/	1.2	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
2	a	2281395	Raw rooster	nc	/	/	/	/	/	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
2	c	2231981	Ground pork meat	nc	/	/	/	/	/	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
3	a	2236690	Raw cow's milk cheese (Abondance)	nc	/	/	/	/	/	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
3	b	2318988	Raw cow's milk	nc	/	/	/	/	/	P	EL	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
3	c	2236696	Pasteurized cow's milk cheese (Baskeria)	nc	/	/	/	/	/	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
3	c	2247805	Pasteurized sheep's milk cheese	ac	*L.innocua*	RXL353	Seeding	/	2.2	P	EM	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
3	c	2247810	Pasteurized cow's milk cheese (Fol Epi)	ac	*L.ivanovii*	GQD028	Seeding	/	2.8	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
4	b	2247775	Smoked mackerel	nc	/	/	/	/	/	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
4	b	2316952	Smoked herring	nc	/	/	/	/	/	P	∅	/	/	/	/	A	ND	O&A:EL - Pal:EL
4	c	2247780	Shrimp shell	nc	/	/	/	/	/	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
5	b	2247835	Gratted carot	ac	*L.seeligeri*	ADTW22	Seeding	/	2.8	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
6	b	2333783	Vegetables residues	nc	/	/	/	/	/	P	EL	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅
6	c	2333811	Swab egg product environment area 2	nc	/	/	/	/	/	P	∅	/	/	/	/	A	ND	O&A:∅ - Pal:EL

Table 29: positive deviations

Cat	Type	#	Sample	Contamination						Reference method	Listeria Precis L.spp - 24 LEB 20h at 37°C							
				Type	Strain	Ref	Stress	Stress level	Inoc. level		Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID
1	a	2247840	Tabbouleh	ac	*L.seeligeri*	ADTW22	Seeding	/	2.8	A	DL ø halo	*L.seeligeri*	*L.seeligeri*	+	+	P	PD	O&A: AM / PAL: AM *L.seeligeri*
1	a	2317055	Cooked beef salad	nc	/	/	/	/	/	A	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*
1	a	2333767	Tuna salad, tomatoes, olives, parmesan	ac	*L.welshimeri*	DCJ260	Seeding	/	3.0	A	BM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	*L.welshimeri*
1	a	2319189	Piémontaise	ac	*L. mono*	ALB748	Seeding	/	1.8	A	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*
1	b	2281375	Pizza Regina	nc	/	/	/	/	/	A	BL halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*
2	a	2236736	Raw chicken leg	nc	/	/	/	/	/	A	AL ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*
2	c	2231984	Poultry merguez	nc	/	/	/	/	/	A	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PD	O&A: AM / PAL: AM *L.innocua*
2	c	2236687	Foie gras	nc	/	/	/	/	/	A	BL ø halo	*L.innocua*	*L.innocua*	+	+	P	PD	O&A: AM / PAL: AM *L.innocua*
2	c	2236689	Delicatessen "Boudin noir"	nc	/	/	/	/	/	A	AH ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*
3	c	2247808	Pasteurized cow's milk cheese (Tomme)	ac	*L.ivanovii*	GQD028	Seeding	/	2.8	A	AL avec halo	*L.ivanovii*	*L.ivanovii*	+	+	P	PD	O&A: AM halo/ PAL: AM halo *L.ivanovii*
3	c	2247811	Pasteurized cow's milk cheese (Chaumes)	ac	*L.ivanovii*	GQD028	Seeding	/	2.8	A	AM avec halo	*L.ivanovii*	*L.ivanovii*	+	+	P	PD	O&A: AM halo/ PAL: AM halo *L.ivanovii*
4	a	2247910	Salmon	ac	*L.welshimeri*	TVP191	Seeding	/	2.8	A	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*
4	a	2247913	Tuna	ac	*L.welshimeri*	TVP191	Seeding	/	2.8	A	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*
4	c	2247919	Prawn salad	ac	*L.innocua*	ABB472	Seeding	/	2.6	A	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PD	O&A: AM / PAL: AM *L.innocua*
4	c	2281419	Shrimp fritter	nc	/	/	/	/	/	A	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*
4	c	2281421	Cod accra	nc	/	/	/	/	/	A	AL halo + AM ø halo	*L.mono + L.innocua*	*L.mono + L.innocua*	+/+	+	P	PD	*L.mono + L.innocua*
5	b	2247927	Sliced pinapple	ac	*L.welshimeri*	TXR109	Seeding	/	1.6	A	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*
5	b	2247930	Mixed carots, pepper, cabbage	nc	/	/	/	/	/	A	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*
5	b	2333616	Beets	ac	*L. mono*	BVU991	Seeding	/	2.0	A	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*
5	c	2333619	Pesto and vegetables lasagna	ac	*L. mono*	BXQ019	Seeding	/	2.6	A	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*
6	a	2333627	Poultry line process water	nc	/	/	/	/	/	A	AL halo (2)	*L.monocytogenes (after réiso)*	*L.monocytogenes*	+ (after réiso)	+ (after réiso)	P	PD	*L.monocytogenes*
6	b	2333784	Fish industry residues	nc	/	/	/	/	/	A	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PD	*L.innocua*
6	c	2333774	Wipe environment dairy	nc	/	/	/	/	/	A	AM halo + AL ∅ halo	*L.monocytogenes +L.welshimeri*	*L.monocytogenes +L.welshimeri*	+/+	+/+	P	PD	*L.monocytogenes +L.welshimeri*

16 negative deviations were observed: 11 from naturally contaminated samples and 5 from artificially contaminated samples. For these 16 negative deviations, the presence of *Listeria* spp. in the broth was not detected after streaking on Brilliance Listeria agar and using the additional confirmation protocol of the ISO 16140-2 standard.

23 positive deviations were observed: 12 from naturally contaminated samples and 11 from artificially contaminated samples.

In conclusion, 16 negative deviations and all 23 positive deviations most probably come from the nature of the study design. In an unpaired study, because of the difference of sampling between both methods, and the use of naturally contaminated samples or seeded samples with low levels of contamination, no cell of *Listeria species* may have been present in the sampling of one of the two methods.

4.1.7. Calculation and interpretation of data

Table 30 shows the difference between negative deviations and positive deviations and the acceptability limits.

Table 30: acceptability limits

Cate-gory	Type		Values			
			PD	ND	ND-PD	AL
❶	a	Ready-to-eat	4	1	/	/
	b	Ready-to reheat	1	1		
	c	Pastries and egg-based products	0	1		
	Total		**5**	**3**	**-2**	**3**
❷	a	Raw (frozen and fresh)	2	1	/	/
	b	Meat based products ready-to-reheat	0	0		
	c	Raw and cooked delicatessen	3	1		
	Total		**4**	**2**	**-2**	**3**
❸	a	Raw milk cheeses	0	1	/	/
	b	Other products based on raw milks	0	1		
	c	Heat treated dairy products	2	3		
	Total		**2**	**5**	**3**	**3**
❹	a	Raw products (fresh, frozen)	2	0	/	/
	b	Smoked, marinated	0	2		
	c	Ready-to-eat or ready-to-reheat	3	1		
	Total		**5**	**3**	**-2**	**3**
❺	a	Raw products (fresh, frozen)	0	0	/	/
	b	Mapped vegetables and heat processed	3	1		
	c	Preparations and processed vegetables	1	0		
	Total		**4**	**1**	**-3**	**3**
❻	a	Process and cleaning waters	1	0	/	/
	b	Dusts and residues	1	1		
	c	Surface sampling	1	1		
	Total		**3**	**2**	**-1**	**3**
Total			**23**	**16**	**-7**	**6**

The observed values (ND – PD) are below the acceptability limit for each category and for all categories. The alternative method produces results comparable to the reference method.

4.1.8. Confirmation

For samples analyzed during this extension, all the positive samples obtained were confirmed by the PrecisCheck™ Listeria Lateral Flow strip, by a spot on Palcam, using a biochemical micro-gallery (Microbact 12L) and by the tests described in the reference method.
Note that according to EN ISO 16140-2:2016, all negative samples were confirmed by the reference method.
For 3 samples, 2247764 (Raspberry tartlet), 2231980 (Beef carpaccio) and 2247774 (Salmon tataki) few doubtful blue-green colonies without halo were observed on Brilliance Listeria agar plate. After the purification on the TSAYE media, colonies observed were not characteristic of *Listeria* colonies and the catalase tests were negative.

4.1.9. Enrichment broth storage at 2 – 8°C for 72 hours

A stability study of the enriched broths stored at 5±3°C for 72 hours was performed on all positive and discordant samples. After storage, the broths were reanalyzed by streaking on Brilliance Listeria agar media and confirmed.
Table 31 shows the evolution of the results between the results of the broths analyzed before and after cold storage.

Table 31: evolution of the results due to the cold storage

Category	Type	N° sample	Before storage	After storage
❷	a	2231980	NA (PP)	NA
	b	2281479	NA	PD
❸	a	2236690	ND	PA
❹	b	2247774	NA (PP)	NA
❻	a	2333627	PD	NA

Table 32 shows the difference between negative deviations and positive deviations and the acceptability limits after enrichment broth storage.

Table 32: acceptability limits after cold storage

Cate-gory	Type		Values			
			PD	ND	ND-PD	AL
❶	a	Ready-to-eat	4	1	/	/
	b	Ready-to reheat	1	1		
	c	Pastries and egg-based products	0	1		
	Total		**5**	**3**	**-2**	**3**
❷	a	Raw (frozen and fresh)	2	1	/	/
	b	Meat based products ready-to-reheat	1	0		
	c	Raw and cooked delicatessen	3	1		
	Total		**6**	**2**	**-4**	**3**
❸	a	Raw milk cheeses	0	0	/	/
	b	Other products based on raw milks	0	1		
	c	Heat treated dairy products	2	3		
	Total		**2**	**4**	**2**	**3**
❹	a	Raw products (fresh, frozen)	2	0	/	/
	b	Smoked, marinated	0	2		
	c	Ready-to-eat or ready-to-reheat	3	1		
	Total		**5**	**3**	**-2**	**3**
❺	a	Raw products (fresh, frozen)	0	0	/	/
	b	Mapped vegetables and heat processed	3	1		
	c	Preparations and processed vegetables	1	0		
	Total		**4**	**1**	**-3**	**3**
❻	a	Process and cleaning waters	0	0	/	/
	b	Dusts and residues	1	1		
	c	Surface sampling	1	1		
	Total		**2**	**2**	**0**	**3**
Total			**24**	**15**	**-9**	**6**

The alternative method produces results comparable to the reference method after storage of the broths for 3 days at 5±3°C.

4.1.10. Conservation of the Brilliance™ *Listeria* plates at 5±3°C for 72h

The Brilliance Listeria agar plates were stored for 72 h at 5±3°C and read again only for samples analyzed in 2022. The characteristic colonies are confirmed again with a micro-gallery of identification. No change was observed after storage of the Brilliance Listeria agar plates.

4.1.11. ISO 6887 specific preparations

As presented during the project to the Technical Committee in June 2022, different samples were analyzed by comparing the application of the specific preparation rules described in ISO 6887. The results are presented in the Appendix L but have not been taken into account in the statistical interpretation. The results showed that the preparation of the samples according to ISO 6887 rules had no impact on

the results obtained. This means method users can follow the ISO rules in combination with the Listeria Precis™ for detection of *Listeria* species method protocol, when needed.

4.1.12. Conclusion of the sensitivity study

The statistical tests of the EN ISO 16140-2:2016 standard conclude that the alternative method produces comparable results to the reference method.

4.2. Relative level of detection study

4.2.1. Matrices used

Various "food matrix-strain" pairs were studied in parallel using the reference method and the alternative method, for the studied categories (cf. table 33).

Table 33: matrix-strain pairs for the RLOD study

Category	Test sample	Matrix	Strain	Origin
❶ **Composite foods**	25 g	Deli salad: "piémontaise"	*L. monocytogenes 1/2b ou 3b ou 7* FLD375	Greek salad
❷ **Meat products**	25 g	Rillettes	*L. ivanovii* AAZ671	Rillettes
❸ **Dairy products**	25 g	Raw milk	*L. monocytogenes 1/2b* CLM641	Raw milk cheese
❹ **Seafood and fishery products**	25 g	Smoked salmon	*Listeria innocua* ABB472	Smoked salmon
❺ **Vegetables**	25 g	Ready-to-cook vegetables	*L. monocytogenes 4b* QDB363	Mushroom soup
❻ **Production environmental samples**	25 g	Process water	*Listeria welshimeri* RVG428	Environment

The total flora of the matrix was determined and is set out in the results tables in Appendix M.

4.2.2. Contamination protocol

Three levels of contamination were prepared consisting of a negative control level, a low level, and a higher level.
The negative control level shall not produce positive results. Five replicates were tested for this level.
The low level shall be the theoretical detection level, it was contaminated at 0.7 - 1 CFU per test portion to obtain fractional recovery results. Twenty replicates were tested for this level.
The higher level shall be just above the theoretical detection level, it was contaminated at 2 - 3 CFU per test portion. Five replicates were tested for this level.

The seeding protocol was used. Bulk contaminations were performed on the matrix for the different levels of contamination, then the matrix was stored at 5±3°C for two days before analysis. Samples were then analyzed by the reference and the alternative method.

4.2.3. Results

The detailed results tables are set out in Appendix M.

The RLOD is defined as the ratio of the LODs of the alternative method and the reference method: RLOD= LOD_{alt} / LOD_{ref}. The RLODs calculations were performed according to the standard ISO 16140-2: 2016 using the Excel spreadsheet available for download at http://standards.iso.org/iso/16140, with unknown concentrations. Values of the RLODs are set out in table 34.

The combinated RLODs values were calculated according to the weight of the test samples and to the study design.

Table 34: RLODs values for all categories (RLOD: the estimated relative level of detection value, RLODU: the upper limit of the 95% confidence interval for RLOD, RLODL: the lower limit of the 95% confidence interval for RLOD, b=ln(RLOD): logarithm of the RLOD value, sd(b): standard deviation of b, z-Test statistic: absolute value of the test statistic of the z-Test with the null hypothesis H0: b=0, p-value: p-value of the z-Test).

Name	RLOD	RLODL	RLODU	b=ln(RLOD)	sd(b)	z-Test statistic	p-value
Composite foods	**1.280**	0.536	3.057	0.247	0.435	0.568	0.57
Meat products	**0.407**	0.185	0.898	-0.899	0.396	2.272	1.977
Dairy products	**1.322**	0.549	3.186	0.279	0.44	0.635	0.526
Seafood products	**0.763**	0.366	1.594	-0.27	0.368	0.734	1.537
Vegetables	**1.112**	0.533	2.322	0.106	0.368	0.289	0.773
Environmental samples	**0.776**	0.367	1.644	-0.253	0.375	0.675	1.5
Combined	**0.848**	**0.623**	**1.155**	**-0.164**	**0.154**	**1.067**	**1.714**

The LOD_{50} calculations according to Wilrich & Wilrich POD-LOD calculation program - version 10, are given in table 35.

Table 35: $LOD_{50\%}$ for the alternative and reference method

Matrix/Strain	$LOD_{50\%}$ (CFU/per test) Alternative method	$LOD_{50\%}$ (CFU/per test) Reference method
❶ Deli salad: "piémontaise" / *L. mono 1/2b ou 3b ou 7* FLD375	1.057	0.884
❷ Rillettes / *L. ivanovii* AAZ671	0.304	0.804
❸ Raw milk / *L. monocytogenes 1/2b* CLM641	0.632	0.501
❹ Smoked salmon / *L. innocua* ABB472	0.437	0.549
❺ Ready-to-cook vegetables / *L. monocytogenes 4b* QDB363	0.770	0.700
❻ Process water / *L. welshimeri* RVG428	0.701	0.944
Combinated	**0.620**	**0.719**

4.2.4. Interpretation and conclusion

The RLODs values are below the acceptability limit set at 2.5 for in an unpaired study design for categories as stated in ISO 16140-2:2016.

In conclusion, alternative method Listeria Precis for the detection of *Listeria species* and the reference method show similar LODs values for the detection of *Listeria species* in the categories tested.

4.3. Conclusion of the extension

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

In the sensitivity study of this extension, five food categories and environmental samples were tested. The protocol of the alternative method shows 23 positive deviations (PD) and 16 negative deviations (ND). The observed values for ((ND + PPND) - PD) are below or equal to the acceptability limit for each category and for all the categories.

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

The data and the interpretation of the methods extension comparison study fulfill the requirements of the ISO 16140-2:2016 standard. The Listeria Precis method for the detection of *Listeria* species is considered as equivalent to the standard EN ISO 11290-1:2017.

5. General conclusion

The data and the interpretation of the method comparison study, interlaboratory study and extension study fulfill the requirements of the ISO 16140-2:2016 standard. The Listeria Precis method for the detection of *Listeria* species is considered as equivalent to the standard EN ISO 11290-1:2017.

Le Lion d'Angers, March 20, 2023
François Le Nestour
Head of the Microbiology Department

APPENDICES

APPENDIX A
Oxoid™ *Listeria* Precis™ Detection Method

25 g of sample +
225 ml ONE Broth-Listeria
One swab to 10 ml of ONE Broth-Listeria
One sponge to 100 ml of ONE Broth-Listeria

30±1°C for 25±3 h

Possibility to store for 72 h at 5±3°C

Streak 10µl onto Brilliance™ *Listeria* agar using a basic loop

Incubation at 37±1°C for 24±2 h (except for meat products enriched in ONE Broth-Listeria)
For meat products enriched in ONE Broth-Listeria, re-incubate the plates that show no blue colonies at 37±1°C for 24±2 h

Typical colonies:
Blue colonies are presumptive positive *Listeria* species
Blue colonies with halo are presumptive positive *Listeria monocytogenes*

Oxoid™ Microbact™ 12L biochemical galleries or equivalent

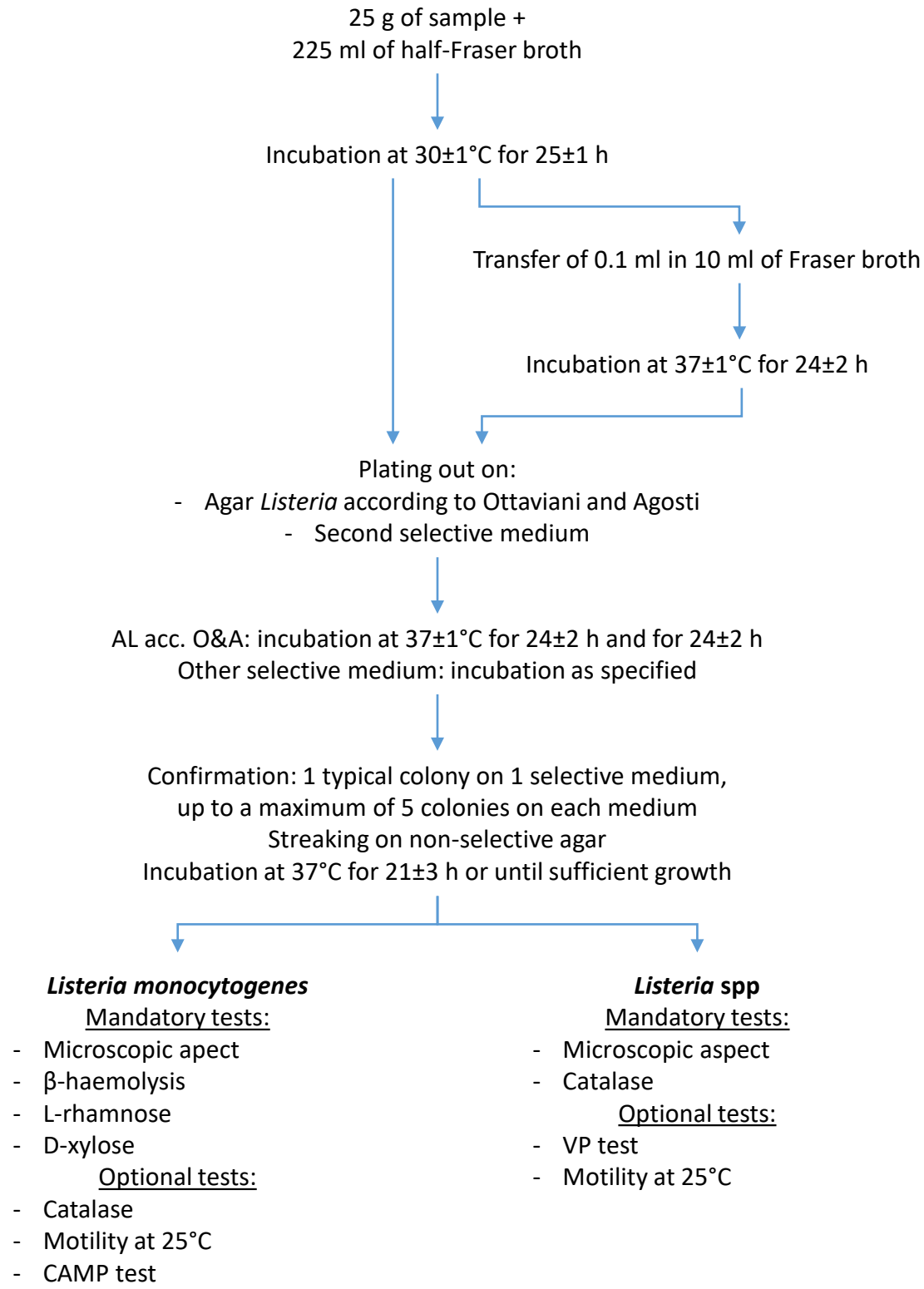
Or
EN ISO 11290:2017 confirmation procedure

Or
Molecular Hybridization test as described in EN ISO 7218:2017

Or
Any appropriate EN ISO 16140-6:2019 validated confirmation method

APPENDIX B
EN ISO 11290-1:2017

Diagram of the procedure as described in the standard



Cat.	Type	Date	#	Matrix	Strain	Origin	Injury protocol	Injury measurement	Inoculation level		Result
2	b	2022	2247796	Raw milk	*L.innocua* XKU847	Raw milk cheese	Seeding 48h 3°C±2°C	/	3-3-2-3-3	2.8	+
2	b	2022	2247797	Raw milk	*L.innocua* XKU847	Raw milk cheese	Seeding 48h 3°C±2°C	/	3-3-2-3-3	2.8	+
2	b	2022	2247798	Raw milk	*L.innocua* XKU847	Raw milk cheese	Seeding 48h 3°C±2°C	/	3-3-2-3-3	2.8	+
2	b	2022	2247799	Raw milk	*L.ivanovii* GQD028	Environment dairy products	Seeding 48h 3°C±2°C	/	3-3-2-3-3	2.8	-
2	b	2022	2247800	Raw milk	*L.ivanovii* GQD028	Environment dairy products	Seeding 48h 3°C±2°C	/	3-3-2-3-3	2.8	+
2	b	2022	2247801	Raw milk	*L.innocua* XKU847	Raw milk cheese	Seeding 48h 3°C±2°C	/	3-3-2-3-3	2.8	+
2	b	2022	2247802	Raw milk	*L.innocua* RXL353	Raw milk cheese	Seeding 48h 3°C±2°C	/	2-3-2-2-2	2.2	+
2	b	2022	2247803	Raw milk	*L.innocua* RXL353	Raw milk cheese	Seeding 48h 3°C±2°C	/	2-3-2-2-2	2.2	+
2	c	2022	2247804	Pasteurized cow's milk cheese (Cantal)	*L.innocua* RXL353	Raw milk cheese	Seeding 48h 3°C±2°C	/	2-3-2-2-2	2.2	+
2	c	2022	2247805	Pasteurized sheep's milk cheese	*L.innocua* RXL353	Raw milk cheese	Seeding 48h 3°C±2°C	/	2-3-2-2-2	2.2	+
2	c	2022	2247806	Organic pasteurized cow's milk cheese	*L.innocua* RXL353	Raw milk cheese	Seeding 48h 3°C±2°C	/	2-3-2-2-2	2.2	+
2	c	2022	2247807	Pasteurized cow's milk cheese (Chamois d'Or))	*L.innocua* RXL353	Raw milk cheese	Seeding 48h 3°C±2°C	/	2-3-2-2-2	2.2	+
2	c	2022	2247808	Pasteurized cow's milk cheese (Tomme)	*L.ivanovii* GQD028	Environment dairy products	Seeding 48h 3°C±2°C	/	3-3-2-3-3	2.8	+
2	c	2022	2247809	Pasteurized sheep's milk cheese	*L.ivanovii* GQD028	Environment dairy products	Seeding 48h 3°C±2°C	/	3-3-2-3-3	2.8	-
2	c	2022	2247810	Pasteurized cow's milk cheese (Fol Epi)	*L.ivanovii* GQD028	Environment dairy products	Seeding 48h 3°C±2°C	/	3-3-2-3-3	2.8	+
2	c	2022	2247811	Pasteurized cow's milk cheese (Chaumes)	*L.ivanovii* GQD028	Environment dairy products	Seeding 48h 3°C±2°C	/	3-3-2-3-3	2.8	-
3	a	2005	20 PP SC1	Salmon	*L.monocytogenes* 1/2b	Smoked salmon	Spiking 3 days at -20°C & 30 min 50°C	0.7	/	1.0	+
3	a	2017	5196	Pilchards fillets	*L.monocytogenes* Ad 1412	Smoked salmon	Seeding 48h 3°C±2°C	/	/	1.4	+
3	a	2022	2247910	Salmon	*L.welshimeri* TVP191	Salmon	Seeding 48h 3°C±2°C	/	3-5-1-4-1	2.8	-
3	a	2022	2247911	Cod	*L.welshimeri* TVP191	Salmon	Seeding 48h 3°C±2°C	/	3-5-1-4-1	2.8	+
3	a	2022	2247912	Hake	*L.welshimeri* TVP191	Salmon	Seeding 48h 3°C±2°C	/	3-5-1-4-1	2.8	+
3	a	2022	2247913	Tuna	*L.welshimeri* TVP191	Salmon	Seeding 48h 3°C±2°C	/	3-5-1-4-1	2.8	-
3	a	2022	2247914	Filet of julienne	*L.welshimeri* TVP191	Salmon	Seeding 48h 3°C±2°C	/	3-5-1-4-1	2.8	+
3	b	2022	2247915	Smoked salmon	*L.innocua* ABB472	Marinated salmon	Seeding 48h 3°C±2°C	/	3-2-4-3-1	2.6	+
3	b	2022	2247916	Smoked trut	*L.innocua* ABB472	Marinated salmon	Seeding 48h 3°C±2°C	/	3-2-4-3-1	2.6	+
3	b	2022	2247812	Smoked herring	*L.welshimeri* AJP106	Salmon steak	Seeding 48h 3°C±2°C	/	5-3-2-2-3	3.0	+
3	b	2022	2247813	Smoked salmon	*L.welshimeri* AJP106	Salmon steak	Seeding 48h 3°C±2°C	/	5-3-2-2-3	3.0	+
3	b	2022	2247814	Smoked trout	*L.welshimeri* AJP106	Salmon steak	Seeding 48h 3°C±2°C	/	5-3-2-2-3	3.0	+
3	b	2022	2247815	Smoked herring	*L.welshimeri* AJP106	Salmon steak	Seeding 48h 3°C±2°C	/	5-3-2-2-3	3.0	+
3	c	2005	17 PP SC3	Terrine of fish	*L.monocytogenes 4e*	Raw milk	Spiking HT 30 min 55°C	1.09	/	5.0	+
3	c	2005	19 PP SC3	RTE fish	*L.monocytogenes* 1/2b	Smoked salmon	Spiking HT 30 min 55°C	1.07	/	5.0	+
3	c	2022	2247917	Salad with shrimps	*L.innocua* ABB472	Marinated salmon	Seeding 48h 3°C±2°C	/	3-2-4-3-1	2.6	+
3	c	2022	2247918	Salmon with sorrel	*L.innocua* ABB472	Marinated salmon	Seeding 48h 3°C±2°C	/	3-2-4-3-1	2.6	+
3	c	2022	2247919	Prawn salad	*L.innocua* ABB472	Marinated salmon	Seeding 48h 3°C±2°C	/	3-2-4-3-1	2.6	+
3	c	2022	2247920	St Jacques shell	*L.innocua* ABB472	Marinated salmon	Seeding 48h 3°C±2°C	/	3-2-4-3-1	2.6	+
3	c	2022	2247816	Exquis norvégien	*L.innocua* RXY158	Shrimp shell	Seeding 48h 3°C±2°C	/	4-3-5-3-1	3.0	+
4	a	2017	5203	Zucchini	*L.monocytogenes* Ad545	Salad	Seeding 48h 3°C±2°C	/	/	2.0	+
4	a	2017	5205	Endive	*L.monocytogenes* Ad1672	Zucchini	Seeding 48h 3°C±2°C	/	/	2.2	+
4	a	2017	5207	Pepper	*L.monocytogenes* Ad545	Salad	Seeding 48h 3°C±2°C	/	/	2.0	+
4	a	2022	2247921	Apple	*L.innocua* GWC718	Compound food environment	Seeding 48h 3°C±2°C	/	5-1-2-2-2	2.4	+
4	a	2022	2247922	Endive	*L.innocua* GWC718	Compound food environment	Seeding 48h 3°C±2°C	/	5-1-2-2-2	2.4	-
4	a	2022	2247923	Mushrooms	*L.innocua* GWC718	Compound food environment	Seeding 48h 3°C±2°C	/	5-1-2-2-2	2.4	+
4	a	2022	2247924	Radish	*L.innocua* GWC718	Compound food environment	Seeding 48h 3°C±2°C	/	5-1-2-2-2	2.4	+

Cat.	Type	Date	#	Matrix	Strain	Origin	Injury protocol	Injury measurement	Inoculation level		Result
4	a	2022	2247925	Zucchini	*L.innocua* GWC718	Compound food environment	Seeding 48h 3°C±2°C	/	5-1-2-2-2	2.4	+
4	b	2022	2247926	Mixed carots	*L.welshimeri* TXR109	Chinese noodles with vegetables	Seeding 48h 3°C±2°C	/	1-1-2-2-2	1.6	-
4	b	2022	2247927	Sliced pinapple	*L.welshimeri* TXR109	Chinese noodles with vegetables	Seeding 48h 3°C±2°C	/	1-1-2-2-2	1.6	-
4	b	2022	2247928	Mixed carots, leeks	*L.welshimeri* TXR109	Chinese noodles with vegetables	Seeding 48h 3°C±2°C	/	1-1-2-2-2	1.6	-
4	b	2022	2247929	Sliced carots	*L.welshimeri* TXR109	Chinese noodles with vegetables	Seeding 48h 3°C±2°C	/	1-1-2-2-2	1.6	+
4	b	2022	2247930	Mixed carots, pepper, cabbage	*L.welshimeri* TXR109	Chinese noodles with vegetables	Seeding 48h 3°C±2°C	/	1-1-2-2-2	1.6	-
4	b	2022	2247835	Gratted carot	*L.seeligeri* ADTW22	Zucchini in cubes	Seeding 48h 3°C±2°C	/	3-2-1-2-6	2.8	+
4	b	2022	2247837	Piemontaise	*L.seeligeri* ADTW22	Zucchini in cubes	Seeding 48h 3°C±2°C	/	3-2-1-2-6	2.8	+
4	b	2022	2247840	Tabouleh	*L.seeligeri* ADTW22	Zucchini in cubes	Seeding 48h 3°C±2°C	/	3-2-1-2-6	2.8	+
4	b	2022	2247817	Red peppers	*L.innocua* TWH478	Vegetables	Seeding 48h 3°C±2°C	/	2-3-2-3-1	2.2	+
4	b	2022	2247818	Zucchini sliced	*L.innocua* TWH478	Vegetables	Seeding 48h 3°C±2°C	/	2-3-2-3-1	2.2	+
4	c	2022	2247836	Ckickpea	*L.seeligeri* ADTW22	Zucchini in cubes	Seeding 48h 3°C±2°C	/	3-2-1-2-6	2.8	+
4	c	2022	2247838	Couscous vegetables	*L.seeligeri* ADTW22	Zucchini in cubes	Seeding 48h 3°C±2°C	/	3-2-1-2-6	2.8	+
4	c	2022	2247839	Cooked vegetables	*L.seeligeri* ADTW22	Zucchini in cubes	Seeding 48h 3°C±2°C	/	3-2-1-2-6	2.8	+
4	c	2022	2247841	Cauliflower gratin	*L.seeligeri* TJM186	Environment vegetables	Seeding 48h 3°C±2°C	/	3-3-4-2-2	2.8	+
4	c	2022	2247842	Cauliflower gratin	*L.seeligeri* TJM186	Environment vegetables	Seeding 48h 3°C±2°C	/	3-3-4-2-2	2.8	+
4	c	2022	2247819	Tian vegetables	*L.welshimeri* TLJ742	A pot of vegetables	Seeding 48h 3°C±2°C	/	3-4-3-4-1	3.0	+
4	c	2022	2247820	Cucumbers with cream	*L.welshimeri* TLJ742	A pot of vegetables	Seeding 48h 3°C±2°C	/	3-4-3-4-1	3.0	+
5	a	2022	2247861	Process watercheese factory	*L.welshimeri* RVG428	Environment composite flat	Seeding 48h 3°C±2°C	/	4-2-5-1-3	3.0	-
5	a	2022	2247862	Process watercheese factory	*L.welshimeri* RVG428	Environment composite flat	Seeding 48h 3°C±2°C	/	4-2-5-1-3	3.0	+
5	a	2022	2247863	Cheese line rinse water	*L.welshimeri* RVG428	Environment composite flat	Seeding 48h 3°C±2°C	/	4-2-5-1-3	3.0	+
5	a	2022	2247864	Process water	*L.welshimeri* RVG428	Environment composite flat	Seeding 48h 3°C±2°C	/	4-2-5-1-3	3.0	+
5	a	2022	2247865	Process water	*L.welshimeri* RVG428	Environment composite flat	Seeding 48h 3°C±2°C	/	4-2-5-1-3	3.0	-
5	a	2022	2247866	Process water	*L.welshimeri* RVG428	Environment composite flat	Seeding 48h 3°C±2°C	/	4-2-5-1-3	3.0	+
5	a	2022	2247832	Process water	*L.monocytogenes* BVP365	Environment seafood	Seeding 48h 3°C±2°C	/	3-3-4-2-3	3.0	+
5	a	2022	2247833	Process water	*L.monocytogenes* BVP365	Environment seafood	Seeding 48h 3°C±2°C	/	3-3-4-2-3	3.0	+
5	c	2005	51 E	Dusts	*L.monocytogenes 43*	/	Spiking 30 min 60°C	0.2	/	<1	+
5	c	2005	52 E	Dusts	*L.monocytogenes 43*	/	Spiking 30 min 60°C	0.2	/	<1	+
5	c	2005	54 E	Dusts	*L.monocytogenes 43*	/	Spiking 30 min 60°C	0.2	/	<1	+
5	c	2005	62 E	Dusts	*L.monocytogenes 43*	/	Spiking 45 min 50°C & 2h -80°C	0.4	/	3.0	+
5	c	2005	67 E	Dusts	*L.monocytogenes 18*	/	Spiking 30 min 50°C & 2h -80°C	0.3	/	7.0	+
5	c	2005	68 E	Dusts	*L.monocytogenes 18*	/	Spiking 30 min 50°C & 2h -80°C	0.3	/	7.0	+
5	c	2022	2247937	Dusts pastry industry	*L.welshimeri* TKZ429	Environment	Spiking 30 min 60°C	0.7	2-0-3-1-0	1.2	+
5	c	2022	2247938	Dusts poultry industry	*L.welshimeri* TKZ429	Environment	Spiking 30 min 60°C	0.7	2-0-3-1-0	1.2	+
5	c	2022	2247939	Dusts poultry industry	*L.welshimeri* TKZ429	Environment	Spiking 30 min 60°C	0.7	2-0-3-1-0	1.2	+
5	c	2022	2247940	Dusts powder milk industry	*L.innocua* GRR943	Environment	Spiking 30 min 60°C	0.9	3-2-3-2-3	2.6	+
5	c	2022	2247941	Dusts spicy packaging	*L.innocua* GRR943	Environment	Spiking 30 min 60°C	0.9	3-2-3-2-3	2.6	+
5	c	2022	2247942	Dusts egg powder industry	*L.innocua* GRR943	Environment	Spiking 30 min 60°C	0.9	3-2-3-2-3	2.6	+

Legend

H-: characteristic *Listeria* colonies without halo
H+: characteristic Listeria colonies with 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
H: 100% pure culture
M: 50% *L. monocytogenes* culture L: 25% *L. monocytogenes* culture PHI: no halo
pp: no growth
*: blue colony without halo

Bacterial burden
Ø: no culture
L = low
M = moderate
H = high

Breakdown of flora
A = pure culture of suspect colonies
B = mixture with a majority of suspect colonies
C = mixture with a minority of suspect colonies
D = mixture with rare suspect colonies
E = absence of suspect colonies
(x): x colonies characteristic of Listeria if $x \leq 5$

Type	Year	Sample N°	Product	Reference method: ISO 11290-1/A1						Alternative method: Listeria Precis					
				Half Fraser		Fraser 1		Identification	L. spp result	22 h at 30°C ONE Broth Listeria					
				O&A	Palcam	O&A	Palcam			*Brilliance* ™ Listeria		Confirmations	Final result	Agreement Ref/Alt	ISO 11290-1
										24h	48h (only for meats)	Reference tests			
a+	2005	1PC SC1	Turkey meat	M	+(M)	+(L)	+(L)	*L. monocytogenes*	+	M	M	*L. monocytogenes*	+	PA	/
a+	2005	4PC SC1	Pork meat	M	+(M)	M	+(M)	*L. monocytogenes*	+	M	H	*L. monocytogenes*	+	PA	/
a+	2005	6PC SC1	Duck meat	L	+(L)	-(Fl)	-(Fl)	*L. monocytogenes*	+	M	M	*L. monocytogenes*	+	PA	/
a-	2005	2PC SC1	Veal liver	-	-	-	-	/	-	-	-	/	-	NA	/
a-	2005	12PC SC1	Pork meat	-	-	-	-	/	-	-pp	-	/	-	NA	/
a-	2005	15PC SC1	Pork meat	-	-	-	-	/	-	-	-	/	-	NA	/
a-	2005	27PC SC1	Rabbit meat	-	-	-	-	/	-	-pp	-	/	-	NA	/
b+	2005	7PC SC2	Merguez	L(6col)	+	H(mix)	+	*L. monocytogenes*	+	M	M	*L. monocytogenes*	+	PA	/
b+	2005	8PC SC2	Sausages	-	+(3col)	+	+	*L. monocytogenes*	+	M	M	*L. monocytogenes*	+	PA	/
b+	2005	9PC SC2	Merguez	L(2col)	+(2col)	+(1col)	-	*L. monocytogenes*	+	L	L	*L. monocytogenes*	+	PA	/
b+	2005	11PC SC2	Sausages	+	+(2col)	+	+	*L. monocytogenes*	+	L	L	*L. monocytogenes*	+	PA	/
b-	2005	5PC SC2	Chitterling	-	-	-	-	/	-	-	-	/	-	NA	/
b-	2005	12PC SC2	Merguez	-	-	-	-	/	-	-pp	-pp	/	-	NA	/
b-	2005	14PC SC2	Merguez	-	-	-	-	/	-	-pp	-pp	/	-	NA	/
b-	2005	8PC SC3	Duck bacon	-	-	-	-	/	-	-pp	-pp	/	-	NA	/
b-	2017	7149	RTRH (ham)	-	-	-	-	/	-	-	-	/	-	NA	-
c+	2017	7430	Delicatessen	H+	+	/	/	*L. monocytogenes*	+	H+	H+	*L. monocytogenes*	+	PA	
c+	2005	2PC SC3	Pâté	H 8mm	+	M(mix)	+	*L. monocytogenes*	+	M	M	*L. monocytogenes*	+	PA	/
c+	2005	4PC SC3	Galantine	L(3col)	+	M(mix)	+	*L. monocytogenes*	+	M	M	*L. monocytogenes*	+	PA	/
c+	2017	4787	Low moisture beef sausage	-	st	H-	+	Camp -	+	H+d(1)	H+d(1)	*L. monocytogenes*	+	PA	+
c-	2005	15PC SC2	RTH turkey	-pp	-	-	-	/	-	-pp	-	/	-	NA	/
c-	2017	5106	RTH pork meat	st	st	st	st	/	-	st	st	/	-	NA	-
c-	2017	5107	RTH meat	st	st	st	-	/	-	st	st	/	-	NA	-
c-	2017	5108	RTH chicken meat	st	st	st	st	/	-	-	-	/	-	NA	-
c-	2005	3PC SC3	Chitterling	-	-	-	-	/	-	-	-pp	/	-	NA	/
c-	2005	6PC SC3	Trippes	-	-	-	-	/	-	-pp	-pp	/	-	NA	/
c-	2005	7PC SC3	RTH chicken	-	-	-	-	/	-	-pp	-pp	/	-	NA	/

Type	Year	Sample N°	Product	Half Fraser (**24h** - 30°C) - ISO method▪							ONE BROTH (22h - 30°C)									ONE BROTH (22h - 30°C) - 72h 5±3°C		
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO confirmation	Result	Agree-ment	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance™ 72h±3°C	Result	Agree-ment	Brilliance	Result	Agree-ment
						AL	Palcam	Camp Test	API List														
a-	2022	2231969	Spicy chicken thigh	∅	∅	∅	∅	/	/	A	EL	∅	/	/	A	NA	AL:ø Pal:ø	EL	A	NA	/	/	/
a-	2022	2231975	Raw chicken leg	∅	∅	∅	∅	/	/	A	∅	∅	/	/	A	NA	AL:ø Pal:ø	∅	A	NA	/	/	/
a-	2022	2231976	Duck liver	∅	∅	∅	∅	/	/	A	∅	∅	/	/	A	NA	AL:ø Pal:ø	∅	A	NA	/	/	/
a-	2022	2231980	Beef carpaccio	∅	EL	∅	EL	/	/	A	∅	∅	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
a-	2022	2236735	Raw lamb meat	∅	∅	∅	∅	/	/	A	∅	∅	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
a-	2022	2236736	Raw chicken leg	∅	∅	∅	∅	/	/	A	EL	EL	/	/	A	NA	O&A:ø Pal:ø	EL	A	NA	/	/	/
a+	2022	2231965	Chopped steak	ALø halo	AL	AM ø halo	AM	*L. innocua*	*L. innocua*	P	Al ø halo	∅	*L.innocua*	*L.innocua*	P	PA	AL: AM ø halo Pal: AM *L.innocua*	Al ø halo	P	PA	AL ø halo	P	PA
a+	2022	2231966	Pork meat	∅	∅	∅	∅	/	/	A	Al ø halo	∅	*L.welshimeri*	*L.welshimeri*	P	PD	AL: AM ø halo Pal: AM *L.welshimeri*	Al ø halo	P	PD	AL ø halo	P	PD
a+	2022	2231970	Cutlet Milanese	∅	∅	BM ø halo	BM	*L.welshimeri*	*L.welshimeri*	P	∅	∅	/	/	A	ND	AL:ø Pal:ø	∅	A	ND	∅	A	ND
a+	2022	2231973	Raw turkey cutlet	∅	∅	AM ø halo	AM	*L.welshimeri*	*L.welshimeri*	P	Al ø halo	∅	*L.welshimeri*	*L.welshimeri*	P	PA	AL: AM ø halo Pal: AM *L.welshimeri*	Al ø halo	P	PA	AL ø halo	P	PA

Type	Year	Sample N°	Product	Half Fraser (**24h** - 30°C) - ISO method▪							ONE BROTH (22h - 30°C)									ONE BROTH (22h - 30°C) - 72h 5±3°C		
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO confirmation	Result	Agree-ment	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance™ 72h±3°C	Result	Agree-ment	Brilliance	Result	Agree-ment
						AL	Palcam	Camp Test	API List														
a+	2022	2231977	Duck steak	AM ø halo	AM	AM ø halo	AM	*L.innocua*	*L.innocua*	P	AM ø halo	∅	*L.innocua*	*L.innocua*	P	PA	AL: AM ø halo Pal: AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
a+	2022	2231978	Duck liver	AL ø halo	BL	AM ø halo	AM	*L.innocua*	*L.innocua*	P	∅	∅	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	∅	A	ND
a+	2022	2231979	Pork meat	∅	EL	∅	EL	/	/	A	AM ø halo	AM ø halo	*L.welshimeri*	*L.welshimeri*	P	PD	AL: AM ø halo Pal: AM *L.welshimeri*	AM ø halo	P	PD	AM ø halo	P	PD
a+	2022	2247761	Smoked bacon	DM ø halo	AM	AM ø halo	AM	*L.welshimeri*	*L.welshimeri*	P	BL ø halo	BL ø halo	*L.welshimeri*	*L.welshimeri*	P	PA	AL: AM ø halo Pal: AM *L.welshimeri*	BL ø halo	P	PA	BL ø halo	P	PA
b-	2022	2231962	Duck sausage	∅	∅	∅	∅	/	/	A	∅	∅	/	/	A	NA	AL:ø Pal:ø	∅	A	NA	/	/	/
b-	2022	2231982	Duck sausage	∅	∅	∅	∅	/	/	A	∅	∅	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
b-	2022	2231984	Poultry merguez	EL	EL	∅	EL	/	/	A	∅	∅	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
b-	2022	2236734	Merguez	∅	∅	∅	∅	/	/	A	EL	EL	/	/	A	NA	O&A:ø Pal:ø	EL	A	NA	/	/	/
b+	2022	2231961	Ground pork meat	∅	∅	AM ø halo	AM	*L.innocua*	*L.innocua*	P	∅	∅	/	/	A	ND	AL:ø Pal:ø	∅	A	ND	∅	A	ND
b+	2022	2231967	Raw sausage	ALø halo	AL	AM ø halo	AM	*L. welshimeri*	*L. welshimeri*	P	AM ø halo	∅	*L.welshimeri*	*L.welshimeri*	P	PA	AL: AM ø halo Pal: AM *L.welshimeri*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2231972	Raw sausage	∅	∅	∅	∅	/	/	A	Al ø halo	∅	*L.welshimeri*	*L.welshimeri*	P	PD	AL: AM ø halo Pal: AM *L.welshimeri*	Al ø halo	P	PD	AL ø halo	P	PD
b+	2022	2231981	Ground pork meat	∅	∅	AL ø halo	AL	*L.welshimeri*	*L.welshimeri*	P	∅	∅	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	∅	A	ND
b+	2022	2231983	Ground poultry meat	AL halo/AL ∅ halo	AL	DL halo/AL ∅ halo	AL	*L.innocua*	*L.innocua*	P	BM ø halo	BM ø halo	*L.innocua*	*L.innocua*	P	PA	AL: AM ø halo Pal: AM *L.innocua*	BM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2236732	Ground pork meat	AL ø halo	AL	AM ø halo	AL	*L.innocua*	*L.innocua*	P	DL ø halo	DL ø halo	*L.innocua*	*L.innocua*	P	PA	AL: AM ø halo Pal: AM *L.innocua*	DL ø halo	P	PA	CL ø halo	P	PA
b+	2022	2236733	Ground chicken meat	DL ø halo	DL	DL ø halo	DL	*L.innocua*	*L.innocua*	P	DL ø halo	DL ø halo	*L.innocua*	*L.innocua*	P	PA	AL: AM ø halo Pal: AM *L.innocua*	DL ø halo	P	PA	BL ø halo	P	PA
c-	2022	2231963	Ground beef pizza	1 colo bleue	∅	∅	∅	/	*API List: ø TSAYE: not charact.*	A	∅	/	/	/	A	NA	AL:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2231968	Pork meat	∅	∅	∅	∅	/	/	A	∅	∅	/	/	A	NA	AL:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2231971	Delicatessen	∅	∅	∅	EL	/	/	A	∅	∅	/	/	A	NA	AL:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2231974	Ham	∅	∅	∅	EL	/	/	A	∅	∅	/	/	A	NA	AL:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2231985	Delicatessen	∅	EL	∅	EL	/	/	A	∅	∅	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2236687	Foie gras	∅	EL	EL	EL	/	/	A	EM	EM	/	/	A	NA	O&A:EM Pal:EM	EM	A	NA	/	/	/
c-	2022	2236688	Liver pate	∅	EL	∅	EL	/	/	A	∅	∅	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2236737	Pepper chicken pizza	∅	∅	∅	∅	/	/	A	∅	∅	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2236739	Kebab chicken panini	∅	∅	∅	∅	/	/	A	EM	EM	/	/	A	NA	O&A:ø Pal:ø	EM	A	NA	/	/	/
c+	2022	2231964	Boudin blanc	ALø halo	AL	AM ø halo	AM	*L. welshimeri*	*L. welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	AL: AM ø halo Pal: AM *L.welshimeri*	AM ø halo	P	PA	AM ø halo	P	PA
c+	2022	2231986	Boudin blanc	AL	EL	AL	EL	*L.welshimeri*	*L.welshimeri*	P	AM ø halo	AM ø halo	*L.welshimeri*	*L.welshimeri*	P	PA	AL: AM ø halo Pal: AM *L.welshimeri*	AM ø halo	P	PA	AM ø halo	P	PA
c+	2022	2236689	Boudin noir	∅	EL	∅	EL	/	/	A	AL ø halo	AL ø halo	*L.welshimeri*	*L.welshimeri*	P	PD	AL: AM ø halo Pal: AM *L.welshimeri*	AL ø halo	P	PD	AM ø halo	P	PD
c+	2022	2236738	Boudin blanc	AL ø halo	AL	AL ø halo	AL	*L.welshimeri*	*L.welshimeri*	P	BM ø halo	BM ø halo	*L.welshimeri*	*L.welshimeri*	P	PA	AL: AM ø halo Pal: AM *L.welshimeri*	BM ø halo	P	PA	BM ø halo	P	PA

Type	Year	Sample N°	Product	Reference method: ISO 11290-1/A1						Alternative method: Listeria Precis						
				Half Fraser		Fraser 1		Identification	L. spp result	22 h at 30°C ONE Broth Listeria						
				O&A	Palcam	O&A	Palcam			*Brilliance* ™ Listeria		Confirmations	Final result	Agreement Ref/Alt 24h	ISO 11290-1	
										24h	48h (only for meats)	Reference tests				
a+	2005	14 PL SC1	Raw milk cheese	M	+	L	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
a+	2005	19 PL SC1	Raw milk cheese	M	+	M	+	*L. mono*	+	H	H	*L. mono*	+	PA	/	
a+	2005	21 PL SC1	Raw milk cheese	M	+	M	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
a+	2005	22 PL SC1	Raw milk cheese	L	+(14col)	H	+	*L. mono*	+	L	M	*L. mono*	+	PA	/	
a-	2005	1 PL SC1	Raw milk cheese	-	-	-	-	/	-	-	-	/	-	NA	/	
a-	2005	5 PL SC1	Raw milk cheese	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
a-	2005	8 PL SC1	Raw milk cheese	-	-	-	-	/	-	-	-	/	-	NA	/	
a-	2005	10 PL SC1	Raw milk cheese	-	-	-	-	/	-	-	-	/	-	NA	/	
b+	2005	1 PL SC2	Raw milk	L(1col)	+(4col)	M	+(M)	*L. mono*	+	M	M	*L. mono*	+	PA	/	
b+	2005	4 PL SC2	Raw milk	-	-	M	+	*L. mono*	+	L	L	*L. mono*	+	PA	/	
b+	2005	6 PL SC2	Raw milk	L(3col)	+(7col)	H	+(H)	*L. mono*	+	M	M	*L. mono*	+	PA	/	
b+	2005	8 PL SC2	Raw milk	L(31col)	+	H	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
b-	2005	7 PL SC2	Raw milk	-	-	-	-	/	-	-	-	/	-	NA	/	
b-	2005	5 PL SC2	Raw milk	-	-	-	-	/	-	-	-	/	-	NA	/	
b-	2005	14 PL SC2	Raw milk	-	-	-	-	/	-	-	-	/	-	NA	/	
b-	2005	17 PL SC2	Raw milk	-	-	-	-	/	-	-	-	/	-	NA	/	
b-	2005	18 PL SC2	Raw milk	-	-	-	-	/	-	-	-	/	-	NA	/	
b-	2005	22 PL SC2	Raw milk	-pp	-	-pp	-	/	-	-pp	-	/	-	NA	/	
b-	2005	23 PL SC2	Raw milk	-pp	-	-pp	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	2 PL SC2	Raw milk	-	-	-	-	/	-	-	-	/	-	NA	/	
c+	2005	13 PL SC3	Pasteurized cheese	M	+	M	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c+	2005	14 PL SC3	Pasteurized cheese	M	+	M	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c+	2005	15 PL SC3	Pasteurized cheese	L(4col)	+	M	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c+	2005	16 PL SC3	Pasteurized cheese	M	+	+	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c-	2005	1 PL SC3	Pasteurized cheese	-	-	-	-	/	-	-	-	/	-	NA	/	
c-	2005	2 PL SC3	Pasteurized cheese	-	-	-	-	/	-	-pp	-	/	-	NA	/	
c-	2005	3 PL SC3	Pasteurized cheese	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
c-	2005	6 PL SC3	Pasteurized cheese	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
c-	2005	7 PL SC3	Pasteurized cheese	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
c-	2005	8 PL SC3	Pasteurized cheese	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	

Type	Year	Sample N°	Product	Half Fraser (**24h** - 30°C) - ISO method▪							ONE BROTH (22h - 30°C)									ONE BROTH (22h - 30°C) - 72h 5±3°C		
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO confirmation	Result	Agree-ment	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance™ 72h±3°C	Result	Agree-ment	Brilliance	Result	Agree-ment
						AL	Palcam	Camp Test	API List														
a-	2022	15	Raw cow's milk cheese (tomme)	EL colo bleues	EL	EL	EL	/	*API List: ø TSAYE: not charact.*	A	EM	/	/	/	A	NA	O&A:EL Pal:ø	EM	A	NA	/	/	/
a-	2022	29	Raw cow's milk cheese (tomme)	∅	∅	EL	EL	/	/	A	EL	/	/	/	A	NA	O&A:ø Pal:ø	EL	A	NA	/	/	/
a-	2022	2236691	Raw ewe milk cheese (Abondance)	EL	EL	EL	EL	/	/	A	EM	/	/	/	A	NA	O&A:ø Pal:ø	EM	A	NA	/	/	/
a-	2022	2236693	Cottage raw milk cheese	EL	EL	EL	EL	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
a-	2022	2236695	Raw goat milk cheese	EL	∅	EL	EL	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
a-	2022	2247770	Raw milk cheese (Meule)	EM	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/

Type	Year	Sample N°	Product	Half Fraser (**24h** - 30°C) - ISO method▪							ONE BROTH (22h - 30°C)										ONE BROTH (22h - 30°C) - 72h 5±3°C		
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO confirmation	Result	Agree-ment	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance™ 72h±3°C	Result	Agree-ment	Brilliance	Result	Agree-ment
						AL	Palcam	Camp Test	API List														
a+	2022	14	Pasteurized cow's milk cheese	AM ø halo	AM	AM ø halo	AM	*L. innocua*	*L. innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
a+	2022	2236690	Raw cow's milk cheese (Abondance)	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	∅	/	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	∅	A	ND
a+	2022	2236692	Raw cow's milk cheese (tomme)	AM ø halo	AM	BM ø halo	BM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
a+	2022	2236694	Raw cow's milk cheese (tomme)	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
a+	2022	2247768	Cottage cheese with raw milk	DM ø halo	DM	AM ø halo	AM	/	*L.innocua*	P	AL ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AL ø halo	P	PA	BL ø halo	P	PA
a+	2022	2247769	Raw milk cheese (Brie)	BM ø halo	AM	AM ø halo	AM	/	*L.grayi*	P	AL ø halo	/	*L.grayi*	*L.grayi*	P	PA	O&A:AM Pal:AM *L.grayi*	AL ø halo	P	PA	BL ø halo	P	PA
b-	2022	2247799	Raw milk	∅	∅	∅	∅	/	/	A	EL	/	/	/	A (FN)	NA	O&A:AM halo Pal:AM *L.ivanovii*	EL	A (FN)	NA	EL	A (FN)	NA
b+	2022	2247796	Raw milk	AM ø halo	AL ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2247797	Raw milk	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2247798	Raw milk	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2247800	Raw milk	AL halo	∅	AL halo	∅	/	*L.ivanovii*	P	AL halo	/	*L.ivanovii*	*L.ivanovii*	P	PA	O&A:AM halo Pal:AM *L.ivanovii*	AL halo	P	PA	AL halo	P	PA
b+	2022	2247801	Raw milk	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AL ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AL ø halo	P	PA	AL ø halo	P	PA
b+	2022	2247802	Raw milk	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2247803	Raw milk	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
c-	2022	2236699	Pasteurized ewe milk cheese	EL	∅	EL	EL	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2236700	Pasteurized goat milk cheese	EL	∅	∅	∅	/	/	A	EL	/	/	/	A	NA	O&A:ø Pal:ø	EL	A	NA	/	/	/
c-	2022	2236701	Pasteurized cow's milk cheese (Tomme)	EL	EM	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2247809	Pasteurized sheep's milk cheese	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	∅	A	NA
c-	2022	2247811	Pasteurized cow's milk cheese (Chaumes)	∅	∅	∅	∅	/	/	A	∅	/	/	/	A (FN)	NA	O&A:AM halo Pal:AM *L.ivanovii*	∅	A (FN)	NA	∅	A (FN)	NA
c+	2022	2236696	Pasteurized cow's milk cheese (Baskeria)	AL ø halo	CL	AM ø halo	AM	/	*L.innocua*	P	∅	/	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	∅	A	ND
c+	2022	2236697	Pasteurized cow's milk cheese (Brie)	AM ø halo	AM	BM ø halo	BM	/	*L.innocua*	P	AH ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AH ø halo	P	PA	AM ø halo	P	PA
c+	2022	2236698	Pasteurized cow's milk cheese (Tomme)	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
c+	2022	2247804	Pasteurized cow's milk cheese (Cantal)	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
c+	2022	2247805	Pasteurized sheep's milk cheese	BM ø halo	BM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
c+	2022	2247806	Organic pasteurized cow's milk cheese	AL ø halo	AL ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AL ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AL ø halo	P	PA	AL ø halo	P	PA
c+	2022	2247807	Pasteurized cow's milk cheese (Chamois d'Or))	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
c+	2022	2247808	Pasteurized cow's milk cheese (Tomme)	EM	∅	EM	∅	/	/	A	AL halo	/	*L.ivanovii*	*L.ivanovii*	P	PD	O&A:AM halo Pal:AM *L.ivanovii*	AL halo	P	PD	AL halo	P	PD
c+	2022	2247810	Pasteurized cow's milk cheese (Fol Epi)	AL halo	∅	AL halo	∅	/	*L.ivanovii*	P	∅	/	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	∅	A	ND

Type	Year	Sample N°	Product	Reference method: ISO 11290-1/A1						Alternative method: Listeria Precis						
				Half Fraser		Fraser 1		Identification	L. spp result	22 h at 30°C ONE Broth Listeria						
										Brilliance ™ Listeria		Confirmations	Final result	Agreement Ref/Alt 24h	ISO 11290-1	
				O&A	Palcam	O&A	Palcam			24h	48h (only for meats)	Reference tests				
a+	2005	4 PP SC1	Salmon Carpaccio	+	+	+	+	*L. mono*	+	L	L	*L. mono*	+	PA	/	
a+	2005	5 PP SC1	Salmon Carpaccio	M	+	M	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
a+	2005	20 PP SC1	Salmon	-	+	-	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
a+	2017	5196	Pilchards fillets	H+	+	/	/	/	+	H+	/	*L. mono*	+	PA	/	
a-	2005	1 PP SC1	Salmon	-	-	-	-	/	-	-pp	-	/	-	NA	/	
a-	2005	2 PP SC1	Herring	-	-	-	-	/	-	-pp	-	/	-	NA	/	
a-	2005	3 PP SC1	Raw fish	-	-	-	-	/	-	-pp	-	/	-	NA	/	
a-	2005	9 PP SC1	Raw fish	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
a-	2005	10 PP SC1	Raw fish	-	-	-	-	/	-	-	-	/	-	NA	/	
a-	2005	11 PP SC1	Raw fish	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
a-	2005	12 PP SC1	Raw fish	-	-	-	-	/	-	-	-	/	-	NA	/	
a-	2005	13 PP SC1	Raw fish	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
a-	2005	14 PP SC1	Salmon	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
a-	2005	16 PP SC1	Raw fish	-	-	-	-	/	-	-	-	/	-	NA	/	
b+	2005	2 PP SC2	Smoked trout	M	+	M	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
b+	2005	4 PP SC2	Smoked salmon	H	+	H	+	*L. mono*	+	H	H	*L. mono*	+	PA	/	
b+	2005	21 PP SC2	Smoked salmon	M	+	M	+	*L. mono*	+	H	H	*L. mono*	+	PA	/	
b+	2005	22 PP SC2	Smoked salmon	M	+	M	+	*L. mono*	+	H	H	*L. mono*	+	PA	/	
b-	2005	1 PP SC2	Smoked salmon	-	-	-	-	/	-	-	-	/	-	NA	/	
b-	2005	8 PP SC2	Smoked salmon	-	-	-	-	/	-	-	-	/	-	NA	/	
b-	2005	12 PP SC2	Smoked salmon	-	-	-	-	/	-	-	-	/	-	NA	/	
b-	2005	13 PP SC2	Smoked salmon	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	14 PP SC2	Smoked trout	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	15 PP SC2	Smoked salmon	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	16 PP SC2	Smoked salmon	-	-	-	-	/	-	-pp	-	/	-	NA	/	
b-	2005	18 PP SC2	Smoked salmon	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	19 PP SC2	Smoked salmon	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	20 PP SC2	Smoked salmon	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
c+	2005	1 PP SC3	Terrine salmon	H	+(H)	H	+(H)	*L. mono*	+	H	H	*L. mono*	+	PA	/	
c+	2005	17 PP SC3	Terrine of fish	+	+	+	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c+	2005	19 PP SC3	RTE fish	+	+	+	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c+	2005	20 PP SC3	RTE fish	+	+	+	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c-	2005	2 PP SC3	Shrimp	-	-	-	-	/	-	-pp	-	/	-	NA	/	
c-	2005	3 PP SC3	Egg lump	-	-	-	-	/	-	-pp	-	/	-	NA	/	
c-	2005	4 PP SC3	Terrine seafood	-	-	-	-	/	-	-pp	-	/	-	NA	/	
c-	2005	5 PP SC3	Terrine seafood	-	-	-	-	/	-	-pp	-	/	-	NA	/	
c-	2005	6 PP SC3	Herring	-	-	-	-	/	-	-pp	-	/	-	NA	/	
c-	2005	7 PP SC3	Anchovy	-	-	-	-	/	-	-pp	-	/	-	NA	/	
c-	2005	8 PP SC3	Bacon salmon	-	-	-	-	/	-	-pp	-	/	-	NA	/	
c-	2005	9 PP SC3	Terrine of lobster	-	-	-	-	/	-	-pp	-	/	-	NA	/	
c-	2005	10 PP SC3	Shrimp	-	-	-	-	/	-	-	-	/	-	NA	/	
c-	2005	11 PP SC3	Terrine of salmon	-	-	-	-	/	-	-	-	/	-	NA	/	

Type	Year	Sample N°	Product	Half Fraser (**24h** - 30°C) - ISO method▪							ONE BROTH (22h - 30°C)									ONE BROTH (22h - 30°C) - 72h 5±3°C		
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO confirmation	Result	Agree-ment	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance™ 72h±3°C	Result	Agree-ment	Brilliance	Result	Agree-ment
						AL	Palcam	Camp Test	API List														
a-	2022	2247772	Salmon tartare	EM	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
a-	2022	2247773	Salmon tartare with oil	EM	EL	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
a-	2022	2247774	Salmon tataki	EM	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
a-	2022	2247910	Salmon	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
a-	2022	2247913	Tuna	∅	∅	∅	∅	/	/	A	∅	/	/	/	A (FN)	NA	O&A:AM Pal:AM *L.welshimeri*	∅	A	NA	/	/	/

Type	Year	Sample N°	Product	Half Fraser (**24h** - 30°C) - ISO method▪							ONE BROTH (22h - 30°C)										ONE BROTH (22h - 30°C) - 72h 5±3°C		
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO confirmation	Result	Agree-ment	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance™ 72h±3°C	Result	Agree-ment	Brilliance	Result	Agree-ment
						AL	Palcam	Camp Test	API List														
a+	2022	2247771	Plaice	EL	∅	∅	∅	/	/	A	AL ø halo	/	*L.innocua*	*L.innocua*	P	PD	O&A:AM ø halo Pal:AM *L.innocua*	AL ø halo	P	PD	BL ø halo	P	PD
a+	2022	2247911	Cod	AL ø halo	AL	AL ø halo	AL	/	*L.welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AM ø halo	P	PA	AM ø halo	P	PA
a+	2022	2247912	Hake	AL ø halo	AL	AL ø halo	AL	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	AL ø halo	P	PA
a+	2022	2247914	Filet of julienne	AL ø halo	AL	AL ø halo	AL	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	AL ø halo	P	PA
b-	2022	2247776	Smoked salmon	EL	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
b+	2022	2247775	Smoked mackerel	EM	EM	AM ø halo	AM	/	*L.innocua*	P	∅	/	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	EM	A	ND
b+	2022	2247812	Smoked herring	∅	∅	AL ø halo	AL	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	AL ø halo	P	PA
b+	2022	2247813	Smoked salmon	EL	EL	AL ø halo	AL	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	AL ø halo	P	PA
b+	2022	2247814	Smoked trout	∅	∅	AL ø halo	AL	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	AL ø halo	P	PA
b+	2022	2247815	Smoked herring	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	AL ø halo	P	PA
b+	2022	2247915	Smoked salmon	AL ø halo	AL	AL ø halo	AL	/	*L.innocua*	P	∅	/	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	AL ø halo	P	PA
b+	2022	2247916	Smoked trut	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
c-	2022	2247777	Salmon shell	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2247778	Fish salad	EM	EM	∅	EM	/	/	A	EL	/	/	/	A	NA	O&A:ø Pal:ø	EL	A	NA	/	/	/
c-	2022	2247779	King prawns and scallops	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c+	2022	2247780	Shrimp shell	EM	EM	AM ø halo	AM	/	*L.welshimeri*	P	∅	/	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	∅	A	ND
c+	2022	2247781	Surimi shell	EM	∅	AM ø halo	AM	/	*L.welshimeri*	P	∅	/	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	∅	A	ND
c+	2022	2247816	Exquis norvégien	BM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	BM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	BM ø halo	P	PA	BM ø halo	P	PA
c+	2022	2247917	Salad with shrimps	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AL ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AL ø halo	P	PA	AL ø halo	P	PA
c+	2022	2247918	Salmon with sorrel	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
c+	2022	2247919	Prawn salad	ø	EL	ø	EL	/	/	A	AM ø halo	/	*L.innocua*	*L.innocua*	P	PD	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PD	AM ø halo	P	PD
c+	2022	2247920	St Jacques shell	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA

Type	Year	Sample N°	Product	Reference method: ISO 11290-1/A1						Alternative method: Listeria Precis						
				Half Fraser		Fraser 1		Identification	L. spp result	22 h at 30°C ONE Broth Listeria						
				O&A	Palcam	O&A	Palcam			*Brilliance* ™ Listeria		Confirmations	Final result	Agreement Ref/Alt 24h	ISO 11290-1	
										24h	48h (only for meats)	Reference tests				
a+	2017	4801	Corn	-	-	st	-	/	-	H+	/	*L. mono*	+	PD	/	
a+	2017	5203	Zucchini	H+	+			*L. mono*	+	H+	/	*L. mono*	+	PA	/	
a+	2017	5205	Endive	H+	+	/	/	*L. mono*	+	H+	/	*L. mono*	+	PA	/	
a+	2017	5207	Pepper	H+	+	/	/	*L. mono*	+	H+	/	*L. mono*	+	PA	/	
a-	2005	3 PVD SC1b	Broccoli	-	-	-	-	/	-	-	-	/	-	NA	/	
a-	2005	4 PVD SC1b	Radish	-	-	-	-	/	-	-	-	/	-	NA	/	
a-	2017	4805	Raw potatoes	st	st	st	st	/	-	st	/	/	-	NA	/	
a-	2017	4807	Chive	st	st	st	-	/	-	-	/	/	-	NA	/	
a-	2017	4808	Parsley	st	-	st	st	/	-	-	/	/	-	NA	/	
a-	2017	4979	Parsley	-	-	-	-	/	-	-	/	/	-	NA	/	
a-	2017	4980	Mushrooms	-	-	-	-	/	-	-	/	/	-	NA	/	
a-	2017	4981	Eggplant	st	st	st	st	/	-	st	/	/	-	NA	/	
a-	2017	4982	Zucchini	-	-	-	-	/	-	-	/	/	-	NA	/	
a-	2017	4983	Leeks	-	-	-	-	/	-	-	/	/	-	NA	/	
b+	2005	13 PVD SC2b	Green pepper	L	+(7col)	L(4col)	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
b+	2005	17 PVD SC2b	Red pepper	+(18col)	+(9col)	+	+	*L. mono*	+	L	L	*L. mono*	+	PA	/	
b+	2005	25 PVD SC2b	Green pepper	+	+	+	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
b+	2017	4804	Broccoli	H+	+	/	/	*L. mono*	+	H+	/	*L. mono*	+	PA	/	
b-	2005	1 PVD SC2b	Green pepper	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	3 PVD SC2b	Red pepper	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	8 PVD SC2b	Red pepper	-pp	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	9 PVD SC2b	Yellow pepper	-pp	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	10 PVD SC2b	Yellow pepper	-pp	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	11 PVD SC2b	Zucchini	-pp	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	12 PVD SC2b	Green pepper	-pp	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	15 PVD SC2b	Red pepper	-	-	-	-	/	-	-pp	-	/	-	NA	/	
b-	2005	22 PVD SC2b	Red pepper	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
b-	2005	26 PVD SC2b	Green pepper	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
c+	2005	5 PVD SC3b	RTE salad	M	+	M	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c+	2005	6 PVD SC3b	RTE salad	+	+	+	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c+	2005	7 PVD SC3b	RTE salad	+	+	+	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c+	2005	8 PVD SC3b	RTE salad	M	+	+	+	*L. mono*	+	M	M	*L. mono*	+	PA	/	
c-	2005	2 PVD SC3b	Chive	-pp	-pp	-	-	/	-	-pp	-pp	/	-	NA	/	
c-	2005	3 PVD SC3b	Corn	-	-	-	-	/	-	-	-	/	-	NA	/	
c-	2005	9 PVD SC3b	RTE salad	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
c-	2005	10 PVD SC3b	RTE salad	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
c-	2005	12 PVD SC3b	RTE salad	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
c-	2005	13 PVD SC3b	RTE salad	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
c-	2005	14 PVD SC3b	RTE salad	-	-	-	-	/	-	-pp	-	/	-	NA	/	
c-	2005	15 PVD SC3b	RTE salad	-	-	-	-	/	-	-pp	-pp	/	-	NA	/	
c-	2005	16 PVD SC3b	Cooked carrots	-	-	-	-	/	-	-	-	/	-	NA	/	
c-	2017	4798	RTRH (potatoes)	-	-	st	-	/	-	st	/	/	-	NA	/	

Type	Year	Sample N°	Product	Half Fraser (**24h** - 30°C) - ISO method▪							ONE BROTH (22h - 30°C)										ONE BROTH (22h - 30°C) - 72h 5±3°C		
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO confirmation	Result	Agree-ment	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance™ 72h±3°C	Result	Agree-ment	Brilliance	Result	Agree-ment
						AL	Palcam	Camp Test	API List														
a-	2022	2247782	Lettuce	EM	EM	∅	EL	/	/	A	EL	/	/	/	A	NA	O&A:ø Pal:ø	EL	A	NA	/	/	/
a-	2022	2247922	Endive	∅	∅	∅	∅	/	/	A	EL	/	/	/	A	NA	O&A:ø Pal:ø	EL	A	NA	/	/	/
a+	2022	2247783	Raspberry	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AL	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A: AM ø halo Pal:AM *L.welshimeri*	AL	P	PA	CL ø halo	P	PA
a+	2022	2247921	Apple	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	∅	/	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	∅	A	ND
a+	2022	2247923	Mushrooms	AL ø halo	AL	AL ø halo	AL	/	*L.innocua*	P	AL ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AL ø halo	P	PA	AL ø halo	P	PA

Type	Year	Sample N°	Product	Half Fraser (**24h** - 30°C) - ISO method▪							ONE BROTH (22h - 30°C)									ONE BROTH (22h - 30°C) - 72h 5±3°C		
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO confirmation	Result	Agree-ment	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance™ 72h±3°C	Result	Agree-ment	Brilliance	Result	Agree-ment
						AL	Palcam	Camp Test	API List														
a+	2022	2247924	Radish	AL ø halo	AL	AL ø halo	AL	/	*L.innocua*	P	AL ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AL ø halo	P	PA	AM ø halo	P	PA
a+	2022	2247925	Zucchini	EM	EM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
b-	2022	2247926	Mixed carots	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
b-	2022	2247927	Sliced pinapple	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
b-	2022	2247928	Mixed carots, leeks	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
b-	2022	2247930	Mixed carots, pepper, cabbage	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
b+	2022	2247784	Onions	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	∅	/	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	∅	A	ND
b+	2022	2247817	Red peppers	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2247818	Zucchini sliced	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AL ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AL ø halo	P	PA	AL ø halo	P	PA
b+	2022	2247819	Tian vegetables	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2247820	Cucumbers with cream	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2247929	Sliced carots	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	BL ø halo	P	PA
c-	2022	2247785	Cooked vegetables	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2247786	Moussaka	∅	∅	∅	∅	/	/	A	EL	/	/	/	A	NA	O&A:ø Pal:ø	EL	A	NA	/	/	/
c-	2022	2247787	Quinoa and bulgur salad	EM	EM	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2247788	Coral lentils	EM	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c-	2022	2247789	Green beans	EM	EL	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	/	/
c+	2022	2247931	Vegetables	∅	∅	∅	∅	/	/	A	DL ø halo (1)	/	*L.innocua*	*L.innocua*	P	PD	O&A:AM Pal:AM *L.innocua*	DL ø halo (1)	P	PD	DL ø halo	P	PD
c+	2022	2247835	Gratted carot	∅	∅	AL ø halo	∅	/	*L. seeligeri*	P	∅	/	/	/	A	ND	O&A:ø Pal:ø	∅	A	ND	∅	A	ND
c+	2022	2247836	Ckickpea	∅	∅	AL ø halo	∅	/	*L. seeligeri*	P	AL ø halo*	AL ø halo	*L. seeligeri*	*L. seeligeri*	p	PA	O&A:AM Pal:AM *L.seeligeri*	AL ø halo*	p	PA	AL ø halo	P	PA
c+	2022	2247837	Piemontaise	∅	∅	AL ø halo	∅	/	*L. seeligeri*	P	EL	/	/	/	A	ND	O&A:ø Pal:ø	EL	A	ND	EL	A	ND
c+	2022	2247838	Couscous vegetables	∅	∅	AL ø halo	∅	/	*L. seeligeri*	P	AL ø halo*	AL ø halo	*L. seeligeri*	*L. seeligeri*	P	PA	O&A:AM Pal:AM *L.seeligeri*	AL ø halo*	P	PA	AL ø halo	P	PA
c+	2022	2247839	Cooked vegetables	∅	∅	AL ø halo(1 colonie)	∅	/	*L. seeligeri*	P	AL ø halo*	AL ø halo	*L. seeligeri*	*L. seeligeri*	P	PA	O&A:AM Pal:AM *L.seeligeri*	AL ø halo*	P	PA	AL ø halo	P	PA
c+	2022	2247840	Tabouleh	∅	∅	∅	∅	/	/	A	AL ø halo*	AL ø halo	*L. seeligeri*	*L. seeligeri*	P	PD	O&A:AM Pal:AM *L.seeligeri*	AL ø halo*	P	PD	AL ø halo	P	PD
c+	2022	2247841	Cauliflower gratin	∅	∅	AL ø halo	∅	/	*L. seeligeri*	P	AL ø halo*	AL ø halo	*L. seeligeri*	*L. seeligeri*	P	PA	O&A:AM Pal:AM *L.seeligeri*	AL ø halo*	P	PA	AL ø halo	P	PA
c+	2022	2247842	Cauliflower gratin	∅	∅	AL ø halo	∅	/	*L. seeligeri*	P	AL ø halo*	AL ø halo	*L. seeligeri*	*L. seeligeri*	P	PA	O&A:AM Pal:AM *L.seeligeri*	AL ø halo*	P	PA	AL ø halo	P	PA

Type	Year	Sample N°	Product	Reference method: ISO 11290-1/A1						Alternative method: Listeria Precis						
				Half Fraser		Fraser 1		Identification	L. spp result	22 h at 30°C ONE Broth Listeria						
										Brilliance ™ Listeria		Confirmations	Final result	Agreement Ref/Alt 24h	ISO 11290-1	
				O&A	Palcam	O&A	Palcam			24h	48h (only for meats)	Reference tests				
a+	2005	1 E	Siphon water	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
a+	2005	14 E	Siphon water	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
a+	2005	16 E	Siphon water	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
a+	2005	17 E	Siphon water	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
a-	2005	2 E	Siphon water		-		-	/	-	-	/	/	-	NA	/	
a-	2005	4 E	Siphon water		-		-	/	-	-	/	/	-	NA	/	
a-	2005	5 E	Siphon water		-		-	/	-	-	/	/	-	NA	/	
a-	2005	6 E	Siphon water		-		-	/	-	-	/	/	-	NA	/	
a-	2005	7 E	Siphon water		-		-	/	-	-	/	/	-	NA	/	
a-	2005	8 E	Siphon water		-		-	/	-	-	/	/	-	NA	/	
a-	2005	9 E	Siphon water		-		-	/	-	-	/	/	-	NA	/	
a-	2005	10 E	Siphon water		-		-	/	-	-	/	/	-	NA	/	
a-	2005	11 E	Siphon water		-		-	/	-	-	/	/	-	NA	/	
a-	2005	12 E	Siphon water		-		-	/	-	-	/	/	-	NA	/	
b+	2005	32 E	Wipe	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
b+	2005	35 E	Wipe	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
b+	2005	36 E	Wipe	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
b+	2005	37 E	Wipe	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
b-	2005	31 E	Wipe		-		-	/	-	-	/	/	-	NA	/	
b-	2005	33 E	Wipe		-		-	/	-	-	/	/	-	NA	/	
b-	2005	40 E	Wipe		-		-	/	-	-	/	/	-	NA	/	
b-	2005	41 E	Wipe		-		-	/	-	-	/	/	-	NA	/	
b-	2005	42 E	Wipe		-		-	/	-	-	/	/	-	NA	/	
b-	2005	43 E	Wipe		-		-	/	-	-	/	/	-	NA	/	
b-	2005	44 E	Wipe		-		-	/	-	-	/	/	-	NA	/	
b-	2005	47 E	Wipe		-		-	/	-	-	/	/	-	NA	/	
b-	2005	48 E	Wipe		-		-	/	-	-	/	/	-	NA	/	
b-	2017	5121	Wipe	st	st	st	st	/	-	-	/	/	-	NA	/	
c+	2005	51 E	Dusts	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
c+	2005	52 E	Dusts	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
c+	2005	54 E	Dusts	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
c+	2005	62 E	Dusts	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
c+	2005	67E	Dusts	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
c+	2005	68E	Dusts	+	+	+	+	*L. mono*	+	+	/	*L. mono*	+	PA	/	
c-	2005	53 E	Dusts		-		-	/	-	-	/	/	-	NA	/	
c-	2005	55 E	Dusts		-		-	/	-	-	/	/	-	NA	/	
c-	2005	56 E	Dusts		-		-	/	-	-	/	/	-	NA	/	
c-	2005	57 E	Dusts		-		-	/	-	-	/	/	-	NA	/	
c-	2005	58 E	Dusts		-		-	/	-	-	/	/	-	NA	/	
c-	2005	59 E	Dusts		-		-	/	-	-	/	/	-	NA	/	
c-	2005	60 E	Dusts		-		-	/	-	-	/	/	-	NA	/	
c-	2005	65 E	Dusts		-		-	/	-	-	/	/	-	NA		

Type	Year	Sample N°	Product	Half Fraser (**24h** - 30°C) - ISO method▪							ONE BROTH (22h - 30°C)									ONE BROTH (22h - 30°C) - 72h 5±3°C		
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO confirmation	Result	Agree-ment	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance™ 72h±3°C	Result	Agree-ment	Brilliance	Result	Agree-ment
						AL	Palcam	Camp Test	API List														
a-	2022	2247861	Process water cheese factory	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	/	A	NA
a-	2022	2247865	Process water	∅	∅	∅	∅	/	/	A	∅	/	/	/	A	NA	O&A:ø Pal:ø	∅	A	NA	∅	A	NA
a+	2022	2247862	Process water cheese factory	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	AL ø halo	P	PA
a+	2022	2247863	Cheese line rinse water	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	AL ø halo	P	PA

Type	Year	Sample N°	Product	Half Fraser (**24h** - 30°C) - ISO method▪							ONE BROTH (22h - 30°C)										ONE BROTH (22h - 30°C) - 72h 5±3°C		
				AL	Palcam	Fraser tube		Conf.		Result	Brilliance™ 24h	Brilliance™ 48h	Microbact	ISO confirmation	Result	Agree-ment	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance™ 72h±3°C	Result	Agree-ment	Brilliance	Result	Agree-ment
						AL	Palcam	Camp Test	API List														
a+	2022	2247864	Process water	AL ø halo	AL	AM ø halo	AM	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	AL ø halo	P	PA
a+	2022	2247866	Process water	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AL ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AL ø halo	P	PA	AL ø halo	P	PA
a+	2022	2247832	Process water	AL halo	AL	AM halo	AM	/	*L.monocytogenes*	P	AM halo	/	*L.monocytogenes*	*L.monocytogenes*	P	PA	O&A:AM halo Pal:AM *L.mono*	AM halo	P	PA	AL halo	P	PA
a+	2022	2247833	Process water	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AL halo	/	*L.monocytogenes*	*L.monocytogenes*	P	PA	O&A:AM halo Pal:AM *L.mono*	AL halo	P	PA	AL halo	P	PA
b+	2022	2247943	Wipe cold room siphon	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2247944	Wipe chopping block	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2247945	Wipe ground slicing area	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AM ø halo	P	PA	AL ø halo	P	PA
b+	2022	2247946	Wipe ground dosage of shells	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AM ø halo	P	PA	AM ø halo	P	PA
b+	2022	2247947	Wipe seafood inductry	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AM ø halo	P	PA	AL ø halo	P	PA
b+	2022	2247948	Wipe plastic pallet seafood industry	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
c+	2022	2247937	Dusts pastry industry	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AM ø halo	P	PA	AL ø halo	P	PA
c+	2022	2247938	Dusts poultry industry	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AM ø halo	P	PA	AM ø halo	P	PA
c+	2022	2247939	Dusts poultry industry	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	/	*L.welshimeri*	*L.welshimeri*	P	PA	O&A:AM Pal:AM *L.welshimeri*	AM ø halo	P	PA	AL ø halo	P	PA
c+	2022	2247940	Dusts powder milk industry	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA
c+	2022	2247941	Dusts spicy packaging	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AL ø halo	P	PA
c+	2022	2247942	Dusts egg powder industry	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	/	*L.innocua*	*L.innocua*	P	PA	O&A:AM Pal:AM *L.innocua*	AM ø halo	P	PA	AM ø halo	P	PA

Appendix E - Relative level of detection- Study realized by ASEPT (2005)

Raw milk / Strain 18

Level	Inoculated level cells/25 g	IC	Method	Negative	Positive	Total
1	0		Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
2	0,2 (0,09 - 0,37)	0,2	Reference	6	0	6
			Alternative	5	1	6
			Total	11	1	12
3	1,7 (1,2 - 2,28)	0,7	Reference	0	6	6
			Alternative	1	5	6
			Total	1	11	12
4	4 (3,13 - 5,29)	2,6	Reference	0	6	6
			Alternative	0	6	6
			Total	0	12	12

Aerobic mesophilic microflora:

Levels 1, 2 and 3	4 300 CFU/ml
Level 4	490 CFU/ml

Salad / Strain 1

Level	Inoculated level cells/25 g	IC	Method	Negative	Positive	Total
1	0		Reference	6	0	6
			Alternative	6	0	6
			Total	12	0	12
2	0,18 (0,08 - 0,34)	0,2	Reference	3	3	6
			Alternative	4	2	6
			Total	7	5	12
3	2,2 (1,6 - 2,8)	0,7	Reference	1	5	6
			Alternative	1	5	6
			Total	2	10	12
4	4,2 (3,4 - 5,2)	0,9	Reference	0	6	6
			Alternative	0	6	6
			Total	0	12	12

Aerobic mesophilic microflora:

Levels 1, 2, 3 and 4	1 300 000 CFU/g

Matrix: rillettes
Strain: *Listeria ivanovii*

Enumeration of the microorganisms at 30°C: 200 CFU/g

N° sample	Level	Inoculation level (cfu/sample)	Reference method : ISO 11290-1▪							Alternative method: Listeria Precis				
			Half Fraser		Fraser		Confirmation	Final Result	Number positive samples/Total	*Brilliance* ™ Listeria Agar				
			O&A	Palcam	O&A	Palcam				Brilliance 22h	Brilliance 46h	Confirmation	Final result	Number positive samples/Total
2231931	0	0	∅	∅	∅	∅	/	A	0/5	∅	∅	/	A	0/5
2231932			∅	∅	∅	∅	/	A		∅	∅	/	A	
2231933			∅	∅	∅	∅	/	A		∅	∅	/	A	
2231934			∅	∅	∅	∅	/	A		∅	∅	/	A	
2231935			∅	∅	∅	∅	/	A		∅	∅	/	A	
2231936	1	0.4	∅	∅	∅	∅	/	A	8/20	AL	AL	*L. ivanovii*	P	12/20
2231937			∅	∅	∅	∅	/	A		∅	∅	/	A	
2231938			∅	∅	∅	∅	/	A		AL	AL	*L. ivanovii*	P	
2231939			∅	∅	∅	∅	/	A		AL	AL	*L. ivanovii*	P	
2231940			∅	∅	∅	∅	/	A		AL	AL	*L. ivanovii*	P	
2231941			∅	∅	∅	∅	/	A		∅	∅	/	A	
2231942			AL	AL	AM	AL	*L. ivanovii*	P		AM	AM	*L. ivanovii*	P	
2231943			AL	AL	AL	AL	*L. ivanovii*	P		∅	∅	/	A	
2231944			∅	∅	∅	∅	/	A		∅	∅	/	A	
2231945			∅	∅	∅	∅	/	A		AL	AL	*L. ivanovii*	P	
2231946			∅	∅	∅	∅	/	A		∅	∅	/	A	
2231947			BL	∅	AL	AL	*L. ivanovii*	P		AL	AL	*L. ivanovii*	P	
2231948			∅	∅	∅	∅	/	A		AL	AL	*L. ivanovii*	P	
2231949			AL	AL	AL	AL	*L. ivanovii*	P		∅	∅	/	A	
2231950			AL	AL	AL	AL	*L. ivanovii*	P		∅	∅	/	A	
2231951			AL	AL	AL	AL	*L. ivanovii*	P		AL	AL	*L. ivanovii*	P	
2231952			∅	∅	∅	∅	/	A		AM	AM	*L. ivanovii*	P	
2231953			AL	AL	AL	AL	*L. ivanovii*	P		∅	∅	/	A	
2231954			AL	AL	AL	AL	*L. ivanovii*	P		AL	AL	*L. ivanovii*	P	
2231955			∅	∅	∅	∅	/	A		AL	AL	*L. ivanovii*	P	
2231956	2	2.1	AL	AL	AL	AL	*L. ivanovii*	P	3/5	AL	AL	*L. ivanovii*	P	4/5
2231957			AL	AL	AL	AL	*L. ivanovii*	P		AL	AL	*L. ivanovii*	P	
2231958			AL	AL	AL	AL	*L. ivanovii*	P		AL	AL	*L. ivanovii*	P	
2231959			∅	∅	∅	∅	/	A		AL	AL	*L. ivanovii*	P	
2231960			∅	∅	∅	∅	/	A		∅	∅	/	A	

Matrix: smoked salmon
Strain: *Listeria innocua*

Enumeration of the microorganisms at 30°C: 3600 CFU/g

N° sample	Level	Inoculation level (cfu/sample)	Reference method : ISO 11290-1▪							Alternative method: Listeria Precis			
			Half Fraser		Fraser		Confirmation	Final Result	Number positive samples/Total	*Brilliance* ™ Listeria Agar			
			O&A	Palcam	O&A	Palcam				Brilliance 22h	Confirmation	Final result	Number positive samples/Total
2236702	0	0	∅	∅	∅	∅	/	A	0/5	∅	/	A	0/5
2236703			∅	∅	∅	∅	/	A		∅	/	A	
2236704			∅	∅	∅	∅	/	A		∅	/	A	
2236705			∅	∅	∅	∅	/	A		∅	/	A	
2236706			∅	∅	∅	∅	/	A		∅	/	A	
2236707	1	0.7	∅	∅	∅	∅	/	A	11/20	AM	*L.innocua*	P	8/20
2236708			∅	∅	∅	∅	/	A		∅	/	A	
2236709			AL	AL	AM	AM	*L.innocua*	P		∅	/	A	
2236710			AL	AL	AM	AM	*L.innocua*	P		∅	/	A	
2236711			∅	∅	∅	∅	/	A		∅	/	A	
2236712			∅	∅	∅	∅	/	A		∅	/	A	
2236713			∅	∅	∅	∅	/	A		AL	*L.innocua*	P	
2236714			AL	∅	AM	AM	*L.innocua*	P		∅	/	A	
2236715			∅	∅	∅	∅	/	A		AL	*L.innocua*	P	
2236716			∅	∅	∅	∅	/	A		∅	/	A	
2236717			AL	AM	AM	AM	*L.innocua*	P		AM	*L.innocua*	P	
2236718			∅	∅	∅	∅	/	A		∅	/	A	
2236719			AM	AM	AM	AM	*L.innocua*	P		∅	/	A	
2236720			AL	AL	AM	AM	*L.innocua*	P		AM	*L.innocua*	P	
2236721			AL	AL	AM	AM	*L.innocua*	P		AL	*L.innocua*	P	
2236722			AM	AL	AM	AM	*L.innocua*	P		∅	/	A	
2236723			AL	AL	AM	AM	*L.innocua*	P		∅	/	A	
2236724			AL	AL	AM	AM	*L.innocua*	P		AM	*L.innocua*	P	
2236725			∅	∅	∅	∅	/	A		∅	/	A	
2236726			AL	AL	AM	AM	*L.innocua*	P		AM	*L.innocua*	P	
2236727	2	2.0	AL	AL	AM	AM	*L.innocua*	P	5/5	AM	*L.innocua*	P	5/5
2236728			AL	AL	AM	AM	*L.innocua*	P		AM	*L.innocua*	P	
2236729			AL	AL	AM	AM	*L.innocua*	P		AM	*L.innocua*	P	
2236730			AL	AL	AM	AM	*L.innocua*	P		AM	*L.innocua*	P	
2236731			AL	AL	AM	AM	*L.innocua*	P		AM	*L.innocua*	P	

Matrix: process water
Strain: *Listeria welshimeri*

Enumeration of the microorganisms at 30°C: 3.2 10^7 CFU/g

N° sample	Level	Inoculation level (cfu/sample)	Reference method : ISO 11290-1▪							Alternative method: Listeria Precis			
			Half Fraser		Fraser		Confirmation	Final Result	Number positive samples/Total	*Brilliance* ™ Listeria Agar			
			O&A	Palcam	O&A	Palcam				Brilliance 22h	Confirmation	Final result	Number positive samples/Total
2247867	0	0	∅	∅	∅	∅	/	A	0/5	∅	/	A	0/5
2247868			∅	∅	∅	∅	/	A		∅	/	A	
2247869			∅	∅	∅	∅	/	A		∅	/	A	
2247870			∅	∅	∅	∅	/	A		∅	/	A	
2247871			∅	∅	∅	∅	/	A		∅	/	A	
2247872	1	1.0	AM	AM	AM	AM	*L.welshimeri*	P	13/20	AL	*L.welshimeri*	P	12/20
2247873			AL	AL	AM	AM	*L.welshimeri*	P		AM	*L.welshimeri*	P	
2247874			AM	AM	AM	AM	*L.welshimeri*	P		AM	*L.welshimeri*	P	
2247875			AL	AL	AM	AM	*L.welshimeri*	P		∅	/	A	
2247876			AL	AL	AM	AM	*L.welshimeri*	P		∅	/	A	
2247877			∅	∅	∅	∅	/	A		AM	*L.welshimeri*	P	
2247878			AL	AL	AM	AM	*L.welshimeri*	P		AM	*L.welshimeri*	P	
2247879			∅	∅	∅	∅	/	A		AM	*L.welshimeri*	P	
2247880			∅	∅	∅	∅	/	A		AM	*L.welshimeri*	P	
2247881			∅	∅	∅	∅	/	A		AM	*L.welshimeri*	P	
2247882			AL	AL	AM	AM	*L.welshimeri*	P		∅	/	A	
2247883			∅	∅	∅	∅	/	A		∅	/	A	
2247884			AL	AL	AM	AM	*L.welshimeri*	P		AL	*L.welshimeri*	P	
2247885			∅	∅	∅	∅	/	A		AM	*L.welshimeri*	P	
2247886			AL	AL	AM	AM	*L.welshimeri*	P		∅	/	A	
2247887			AL	AL	AM	AM	*L.welshimeri*	P		∅	/	A	
2247888			∅	∅	∅	∅	/	A		∅	/	A	
2247889			AL	AL	AM	AM	*L.welshimeri*	P		AL	*L.welshimeri*	P	
2247890			AL	AL	AM	AM	*L.welshimeri*	P		AM	*L.welshimeri*	P	
2247891			AL	AL	AM	AM	*L.welshimeri*	P		∅	/	A	
2247892	2	2.0	∅	∅	∅	∅	/	A	1/5	∅	/	A	1/5
2247893			∅	∅	∅	∅	/	A		∅	/	A	
2247894			AL	AL	AM	AM	*L.welshimeri*	P		∅	/	A	
2247895			∅	∅	∅	∅	/	A		∅	/	A	
2247896			∅	∅	∅	∅	/	A		AM	*L.welshimeri*	P	

#	Strain	Reference	Origin	Reading at 24 h				
				OCLA				TSA
				Size of halo	Color of the colony	OBIS test	Streaking on O&A	Aspect of the colony Test d'illumination de Henry (ISO 11290-2:1998)
1	*Listeria monocytogenes*	Lm-P775	Poisson	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
2	*Listeria monocytogenes*	Lm-P777	Poisson	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
3	*Listeria monocytogenes*	Lm-P778	Poisson	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
4	*Listeria monocytogenes*	Lm-P779	Poisson	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
5	*Listeria monocytogenes*	Lm-P780	Poisson	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
6	*Listeria monocytogenes*	Lm-P781	Poisson	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
7	*Listeria monocytogenes*	Lm-P782	Rillettes de saumon aux salicornes	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
8	*Listeria monocytogenes*	Lm-P783	Ecouvillon sur manche d'une pince à désarêter	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
9	*Listeria monocytogenes*	Lm-P784	Filet de saumon cru à l'arrivage	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
10	*Listeria monocytogenes*	Lm-P785	Filet de saumon cru à l'arrivage	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
11	*Listeria monocytogenes*	LM-H170	Pêcheur	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
12	*Listeria monocytogenes*	LM-H171	Bistrot	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
13	*Listeria monocytogenes*	LM-H172	Marché	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
14	*Listeria monocytogenes*	LM-H173	Norvégienne	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
15	*Listeria monocytogenes*	LM-H174	Chou-fleur	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
16	*Listeria monocytogenes*	LM-H175	Chou-fleur	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
17	*Listeria monocytogenes*	LM-I20	Passe-plat n° 2 à 9h30	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
18	*Listeria monocytogenes*	LM-I21	Passe-plat n° 3 à 6h	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
19	*Listeria monocytogenes*	LM-I22	Sol emballage	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection
20	*Listeria monocytogenes*	LM-I23	Tapis avant tunnel S89	<1 mm	Blue / green	- (colorless)	Colonies with halo	Colonies with bluish reflection

#	Strain	Reference	Origin	Number of CFU on TSAYE agar	ISO method				Alternative method Listeria Precis with One Broth								
									Brillance *Listeria* agar								
									Aspect of the colonies						Confirmation		
									Colour		Halo		Size				
					OCLA	PALCAM	FRASER	RESULTAT	24h	48h	24h	48h	24h	48h	ISO	OBIS + (*L.mono*) / -(*L.spp*)	MICROBACT
21	*Listeria innocua*	RXJ222	Fig tartlet	39	/	/	/	/	Blue	Blue	No	No	1mm	2mm	*Listeria innocua*	-	*Listeria innocua*
22	*Listeria innocua*	KUY776	Egg product environment	93	/	/	/	/	Blue	Blue	No	No	1mm	2mm	*Listeria innocua*	-	*Listeria innocua*
23	*Listeria innocua*	RYB922	Smoked sausages	71	/	/	/	/	Blue	Blue	No	No	1mm	2mm	*Listeria innocua*	-	*Listeria innocua*
24	*Listeria innocua*	TYA050	Raw tuna tataki	56	/	/	/	/	Blue	Blue	No	No	1mm	2mm	*Listeria innocua*	-	*Listeria innocua*
25	*Listeria innocua*	TQU555	Tomme with raw milk	40	/	/	/	/	Blue	Blue	No	No	1mm	2mm	*Listeria innocua*	-	*Listeria innocua*
26	*Listeria innocua*	TSA557	Pasteurized Milk Brie	62	/	/	/	/	Blue	Blue	No	No	1mm	2mm	*Listeria innocua*	-	*Listeria innocua*
27	*Listeria innocua*	TTZ273	Diced onions	27	/	/	/	/	Blue	Blue	No	No	1mm	2mm	*Listeria innocua*	-	*Listeria innocua*
28	*Listeria innocua*	TWH478	Vegetable gardener	69	/	/	/	/	Blue	Blue	No	No	1mm	2mm	*Listeria innocua*	-	*Listeria innocua*
29	*Listeria innocua*	XEN574	Salmon shell	38	/	/	/	/	Blue	Blue	No	No	1mm	2mm	*Listeria innocua*	-	*Listeria innocua*

#	Strain	Reference	Origin	Number of CFU on TSAYE agar	ISO method				Alternative method Listeria Precis with One Broth								
									Brillance *Listeria* agar								
									Aspect of the colonies						Confirmation		
									Colour		Halo		Size				
					OCLA	PALCAM	FRASER	RESULTAT	24h	48h	24h	48h	24h	48h	ISO	OBIS + (*L.mono*) / -(*L.spp*)	MICROBACT
30	*Listeria innocua*	TET819	Chicken thigh	99	/	/	/	/	Blue	Blue	No	No	1mm	2mm	*Listeria innocua*	-	*Listeria innocua*
31	*Listeria grayi*	SWZ606	Sausage patty	42	ø	ø	ø	/	ø	ø	ø	ø	ø	ø	/	/	/
				31	AM	EM	ø	*Listeria grayi*	Blue	Blue	No	No	0,5mm	0,5mm	*Listeria grayi*	-	*Listeria grayi*
32	*Listeria grayi*	SWE117	Bayonne ham	55	ø	ø	ø	/	ø	ø	ø	ø	ø	ø	/	/	/
				43	DM	EL	ø	*Listeria grayi*	Blue	Blue	No	No	1mm	1mm	*Listeria grayi*	-	*Listeria grayi*
33	*Listeria grayi*	RZM251	Salmon marinated in dill	49	ø	ø	ø	/	ø	ø	ø	ø	ø	ø	/	/	/
				64	AM	EL	ø	*Listeria grayi*	Blue	Blue	No	No	1mm	1mm	*Listeria grayi*	-	*Listeria grayi*
34	*Listeria grayi*	RZK366	Green bean	74	ø	ø	ø	/	ø	ø	ø	ø	ø	ø	/	/	/
				68	ø	ø	ø	/	Blue	Blue	No	No	1mm	1mm	*Listeria grayi*	-	*Listeria grayi*
35	*Listeria ivanovii*	AAZ671	Turkey cutlet scraps	56	/	/	/	/	Blue	Blue	Yes	Yes	0,5 mm	2mm	*Listeria ivanovii*	-	*Listeria ivanovii*
36	*Listeria ivanovii*	APE161	Merguez	132	/	/	/	/	Blue	Blue	Yes	Yes	0,5 mm	2mm	*Listeria ivanovii*	-	*Listeria ivanovii*
37	*Listeria ivanovii*	GJP629	Environment	56	/	/	/	/	ø	Blue	ø	Yes	ø	0,5 mm	*Listeria ivanovii*	-	*Listeria ivanovii*
38	*Listeria ivanovii*	GQD028	Environment dairy products	53	/	/	/	/	Blue	Blue	Yes	Yes	0,5 mm	2mm	*Listeria ivanovii*	-	*Listeria ivanovii*
39	*Listeria welshimeri*	TXR109	Chinese noodles with vegetables	58	/	/	/	/	Blue	Blue	No	No	1 mm	2mm	*Listeria welshimeri*	-	*Listeria welshimeri*
40	*Listeria welshimeri*	GLX736	Environment dairy products	10	/	/	/	/	Blue	Blue	No	No	1 mm	2mm	*Listeria welshimeri*	-	*Listeria welshimeri*
41	*Listeria welshimeri*	PSX189	Environment meat products	49	/	/	/	/	Blue	Blue	No	No	1 mm	2mm	*Listeria welshimeri*	-	*Listeria welshimeri*
42	*Listeria welshimeri*	TDV458	Andouille from Guéméné	85	/	/	/	/	Blue	Blue	No	No	1 mm	2mm	*Listeria welshimeri*	-	*Listeria welshimeri*
43	*Listeria welshimeri*	TPR354	Toulouse sausage	64	/	/	/	/	Blue	Blue	No	No	1 mm	2mm	*Listeria welshimeri*	-	*Listeria welshimeri*
44	*Listeria welshimeri*	TUH443	Smoked arctic char with 5 berries	35	/	/	/	/	Blue	Blue	No	No	1 mm	2mm	*Listeria welshimeri*	-	*Listeria welshimeri*
45	*Listeria welshimeri*	TVP191	Stripped salmon	37	/	/	/	/	Blue	Blue	No	No	1 mm	2mm	*Listeria welshimeri*	-	*Listeria welshimeri*
46	*Listeria welshimeri*	XCW614	Salmon shell	38	/	/	/	/	Blue	Blue	No	No	1 mm	2mm	*Listeria welshimeri*	-	*Listeria welshimeri*
47	*Listeria welshimeri*	TLJ742	Hotpot	39	/	/	/	/	Blue	Blue	No	No	1 mm	2mm	*Listeria welshimeri*	-	*Listeria welshimeri*
48	*Listeria seeligeri*	DSM20751	Ground	79	/	/	/	/	Blue	Blue	No	No	2 mm	2mm	*Listeria seeligeri*	-	Listeria seeligeri
49	*Listeria seeligeri*	LHFB67	Dairy environment	79	/	/	/	/	Blue	Blue	No	No	3 mm	2mm	*Listeria seeligeri*	-	Listeria seeligeri
50	*Listeria marthi*	DSM23813	Ground	76	/	/	/	/	Blue	Blue	No	No	4 mm	2mm	/	-	/

#	N°	Code	Strain	Origin	Lecture à 24 h				
					OCLA				TSA
					Size of halo	Color of the colony	OBIS test	Streaking on O&A	Aspect of the colony
1	B1	BI-R6	*B. licheniformis*	Ovoproduit	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
2	B2	CIP 5832	*Bacillus cereus*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
3	B3	CIP 6624	*Bacillus cereus*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche
4	B4	CIP 52.75T	*Bacillus circulans*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche
5	B5	CIP 88264	*Candida*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Absence de colonie
6	B7	IND 501	*Enterococcus faecalis*	Souche clinique	/	Absence de colonie	Non réalisé	Non réalisé	Petite colonie beige
7	B8	IND 502	*Enterococcus faecalis*	Souche clinique	/	Absence de colonie	Non réalisé	Non réalisé	Petite colonie beige
8	B9	ATCC 19433	*Enterococcus faecalis*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Petite colonie beige
9	B10	CIP 5855	*Enterococcus faecium*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Colonie beige
10	B11	IND 500	*Enterococcus faecium*	Produit alimentaire	/	Absence de colonie	Non réalisé	Non réalisé	Colonie beige
11	B12	Ec - U2	*Escherichia coli*	Camembert	/	Absence de colonie	Non réalisé	Non réalisé	Colonie beige
12	B13	Ec - U5	*Escherichia coli*	Ovoproduit	/	Absence de colonie	Non réalisé	Non réalisé	Colonie beige
13	B14	ASEPT B 37	*Escherichia coli*	Ovoproduit	/	Absence de colonie	Non réalisé	Non réalisé	Colonie beige
14	B23	CIP 71.39	*Lactobacillus plantarum*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Colonies
15	B24	CIP 103009 T	*Leuconostoc mesenteroïdes*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Absence de colonie
16	B40	P-P1	*Pseudomonas fluorescens*	Ovoproduit	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche
17	B41	CIP 58.69	*Rhodococcus equi*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche
18	B42	ASEPT B 38	*Salmonella enteritidis*	Ovoproduit	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche
19	B43	CIP 5710	*Staphylococcus aureus*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Colonie jaune
20	B44	CIP 53154	*Staphylococcus aureus*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Colonie jaune
21	B45	St-T2	*Staphylococcus aureus*	Camembert	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche
22	B46	ATCC 25953 - St G48	*Staphylococcus aureus*	Collection	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche
23	B90	20060913-	*Bacillus cereus*	Tortis au surimi	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
24	B91	20060914-	*Bacillus cereus*	Poivrière	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
25	B92	20061005-41714	*Bacillus cereus*	Taboulé mexicain	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
26	B93	20060906-36720	*Bacillus cereus*	Poudre de lait lag	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
27	B94	20060906- 36716	*Bacillus cereus*	Poudre de lait niro	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
28	B95	20060914- 38085	*Bacillus cereus*	Poudre de lait lag	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
29	B96	20061005-41648	*Bacillus cereus*	Poudre de lait niro	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
30	B97	20061005-41651	*Bacillus cereus*	Poudre de lait lag	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
31	B98	20060801-30997	*Bacillus cereus*	Poudre d'œuf entier	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
32	B99	20060801-30999	*Bacillus cereus*	Poudre d'œuf entier	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche étalée
33	B100	20060804-31871	*Pseudomonas*	Frisée	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche
34	B101	200608040-31872	*Pseudomonas*	Frisée	/	Absence de colonie	Non réalisé	Non réalisé	Petite colonie blanche
35	B102	20060804-31873	*Pseudomonas*	Mâche	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche
36	B103	20060804-31874	*Pseudomonas*	Mâche	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche
37	B104	20060825-34927	*Pseudomonas*	Gaze environnement	/	Absence de colonie	Non réalisé	Non réalisé	Colonie blanche

Appendix G – Results obtained by each collaborator and the Expert Laboratory (ADRIA Développement, 2009)

Laboratoire: A

Aerobic mesophilic flora : $1,2.10^3$/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
A2	-	-	-	-	-	-	-	-	-	NA
A5	-	-	-	-	-	-	-	-	-	NA
A8	-	-	-	-	-	-	-	-	-	NA
A12	-	-	-	-	-	-	-	-	-	NA
A13	-	-	-	-	-	-	-	-	-	NA
A16	-	-	-	-	-	-	-	-	-	NA
A22	-	-	-	-	-	-	-	-	-	NA
A24	-	-	-	-	-	-	-	-	-	NA
A3	+	+	+	+	+	+	+	+	+	PA
A6	+	+	+	+	+	+	+	+	+	PA
A10	+	+	+	+	+	+	+	+	+	PA
A11	+	+	+	+	+	+	+	+	+	PA
A14	+	+	+	+	+	+	+	+	+	PA
A18	+	+	+	+	+	+	+	+	+	PA
A21	+	+	+	+	+	+	+	+	+	PA
A23	+	+	+	+	+	+	+	+	+	PA
A1	+	+	+	+	+	+	+	+	+	PA
A4	+	+	+	+	+	+	+	+	+	PA
A7	+	+	+	+	+	+	+	+	+	PA
A9	+	+	+	+	+	+	+	+	+	PA
A15	+	+	+	+	+	+	+	+	+	PA
A17	+	+	+	+	+	+	+	+	+	PA
A19	+	+	+	+	+	+	+	+	+	PA
A20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: B

Aerobic mesophilic flora : 1,6.10^3/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
B2	-	-	-	-	-	-	-	-	-	NA
B5	-	-	-	-	-	-	-	-	-	NA
B8	-	-	-	-	-	-	-	-	-	NA
B12	-	-	-	-	-	-	-	-	-	NA
B13	-	-	-	-	-	-	-	-	-	NA
B16	-	-	-	-	-	-	-	-	-	NA
B22	-	-	-	-	-	-	-	-	-	NA
B24	-	-	-	-	-	-	-	-	-	NA
B3	+	+	+	+	+	+	+	+	+	PA
B6	+	+	+	+	+	+	+	+	+	PA
B10	+	+	+	+	+	+	+	+	+	PA
B11	+	+	+	+	+	+	+	+	+	PA
B14	+	+	+	+	+	+	+	+	+	PA
B18	+	+	+	+	+	+	+	+	+	PA
B21	+	+	+	+	+	+	+	+	+	PA
B23	+	+	+	+	+	+	+	+	+	PA
B1	+	+	+	+	+	+	+	+	+	PA
B4	+	+	+	+	+	+	+	+	+	PA
B7	+	+	+	+	+	+	+	+	+	PA
B9	+	+	+	+	+	+	+	+	+	PA
B15	+	+	+	+	+	+	+	+	+	PA
B17	+	+	+	+	+	+	+	+	+	PA
B19	+	+	+	+	+	+	+	+	+	PA
B20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: C

Aerobic mesophilic flora/ 1,2.10^3/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
C2	-	-	-	-	-	-	-	-	-	NA
C5	-	-	-	-	-	-	-	-	-	NA
C8	-	-	-	-	-	-	-	-	-	NA
C12	-	-	-	-	-	-	-	-	-	NA
C13	-	-	-	-	-	-	-	-	-	NA
C16	-	-	-	-	-	-	-	-	-	NA
C22	-	-	-	-	-	-	-	-	-	NA
C24	-	-	-	-	-	-	-	-	-	NA
C3	+	+	+	+	+	+	+	+	+	PA
C6	+	+	+	+	+	+	+	+	+	PA
C10	+	+	+	+	+	+	+	+	+	PA
C11	+	+	+	+	+	+	+	+	+	PA
C14	+	+	+	+	+	+	+	+	+	PA
C18	+	+	+	+	+	+	+	+	+	PA
C21	+	+	+	+	+	+	+	+	+	PA
C23	+	+	+	+	+	+	+	+	+	PA
C1	+	+	+	+	+	+	+	+	+	PA
C4	+	+	+	+	+	+	+	+	+	PA
C7	+	+	+	+	+	+	+	+	+	PA
C9	+	+	+	+	+	+	+	+	+	PA
C15	+	+	+	+	+	+	+	+	+	PA
C17	+	+	+	+	+	+	+	+	+	PA
C19	+	+	+	+	+	+	+	+	+	PA
C20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: E

Aerobic mesophilic flora1,8.10^4/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
E2	-	-	-	-	-	-	-	-	-	NA
E5	-	-	-	-	-	-	-	-	-	NA
E8	-	-	-	-	-	-	-	-	-	NA
E12	-	-	-	-	-	-	-	-	-	NA
E13	-	-	-	-	-	-	-	-	-	NA
E16	-	-	-	-	-	-	-	-	-	NA
E22	-	-	-	-	-	-	-	-	-	NA
E24	-	-	-	-	-	-	-	-	-	NA
E3	+	+	+	+	+	+	+	+	+	PA
E6	+	+	+	+	+	+	+	+	+	PA
E10	+	+	+	+	+	+	+	+	+	PA
E11	+	+	+	+	+	+	+	+	+	PA
E14	+	+	+	+	+	+	+	+	+	PA
E18	+	+	+	+	+	+	+	+	+	PA
E21	+	+	+	+	+	+	+	+	+	PA
E23	+	+	+	+	+	+	+	+	+	PA
E1	+	+	+	+	+	+	+	+	+	PA
E4	+	+	+	+	+	+	+	+	+	PA
E7	+	+	+	+	+	+	+	+	+	PA
E9	+	+	+	+	+	+	+	+	+	PA
E15	+	+	+	+	+	+	+	+	+	PA
E17	+	+	+	+	+	+	+	+	+	PA
E19	+	+	+	+	+	+	+	+	+	PA
E20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: F

Aerobic mesophilic flora/ 2,3.10^3/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
F2	-	-	-	-	-	-	-	-	-	NA
F5	-	-	-	-	-	-	-	-	-	NA
F8	-	-	-	-	-	-	-	-	-	NA
F12	-	-	-	-	-	-	-	-	-	NA
F13	-	-	-	-	-	-	-	-	-	NA
F16	-	-	-	-	-	-	-	-	-	NA
F22	-	-	-	-	-	-	-	-	-	NA
F24	-	-	-	-	-	-	-	-	-	NA
F3	+	+	+	+	+	+	+	+	+	PA
F6	-	-	-	-	-	-	+	+	+	PD
F10	+	+	+	+	+	+	+	+	+	PA
F11	+	+	+	+	+	+	+	+	+	PA
F14	+	+	+	+	+	+	+	+	+	PA
F18	+	+	+	+	+	+	+	+	+	PA
F21	+	+	+	+	+	+	+	+	+	PA
F23	+	+	+	+	+	+	+	+	+	PA
F1	+	+	+	+	+	+	+	+	+	PA
F4	+	+	+	+	+	+	+	+	+	PA
F7	+	+	+	+	+	+	+	+	+	PA
F9	+	+	+	+	+	+	+	+	+	PA
F15	+	+	+	+	+	+	+	+	+	PA
F17	+	+	+	+	+	+	+	+	+	PA
F19	+	+	+	+	+	+	+	+	+	PA
F20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: G

Aerobic mesophilic flora : 1,7.10^3/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
G2	-	-	-	-	-	-	-	-	-	NA
G5	-	-	-	-	-	-	-	-	-	NA
G8	-	-	-	-	-	-	-	-	-	NA
G12	-	-	-	-	-	-	-	-	-	NA
G13	-	-	-	-	-	-	-	-	-	NA
G16	-	-	-	-	-	-	-	-	-	NA
G22	-	-	-	-	-	-	-	-	-	NA
G24	-	-	-	-	-	-	-	-	-	NA
G3	+	+	+	+	+	+	+	+	+	PA
G6	+	+	+	+	+	+	+	+	+	PA
G10	+	+	+	+	+	+	+	+	+	PA
G11	+	+	+	+	+	+	+	+	+	PA
G14	+	+	+	+	+	+	+	+	+	PA
G18	+	+	+	+	+	+	+	+	+	PA
G21	+	+	+	+	+	+	+	+	+	PA
G23	+	+	+	+	+	+	+	+	+	PA
G1	+	+	+	+	+	+	+	+	+	PA
G4	+	+	+	+	+	+	+	+	+	PA
G7	+	+	+	+	+	+	+	+	+	PA
G9	+	+	+	+	+	+	+	+	+	PA
G15	+	+	+	+	+	+	+	+	+	PA
G17	+	+	+	+	+	+	+	+	+	PA
G19	+	+	+	+	+	+	+	+	+	PA
G20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: H

Aerobic mesophilic flora : 3,4.10^3/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
H2	-	-	-	-	-	-	-	-	-	NA
H5	-	-	-	-	-	-	-	-	-	NA
H8	-	-	-	-	-	-	-	-	-	NA
H12	-	-	-	-	-	-	-	-	-	NA
H13	-	-	-	-	-	-	-	-	-	NA
H16	-	-	-	-	-	-	-	-	-	NA
H22	-	-	-	-	-	-	-	-	-	NA
H24	-	-	-	-	-	-	-	-	-	NA
H3	+	+	+	+	+	+	+	+	+	PA
H6	+	+	+	+	+	+	+	+	+	PA
H10	+	+	+	+	+	+	+	+	+	PA
H11	+	+	+	+	+	+	+	+	+	PA
H14	+	+	+	+	+	+	+	+	+	PA
H18	+	+	+	+	+	+	+	+	+	PA
H21	+	+	+	+	+	+	+	+	+	PA
H23	+	+	+	+	+	+	+	+	+	PA
H1	+	+	+	+	+	+	+	+	+	PA
H4	+	+	+	+	+	+	+	+	+	PA
H7	+	+	+	+	+	+	+	+	+	PA
H9	+	+	+	+	+	+	+	+	+	PA
H15	+	+	+	+	+	+	+	+	+	PA
H17	+	+	+	+	+	+	+	+	+	PA
H19	+	+	+	+	+	+	+	+	+	PA
H20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: I

Aerobic mesophilic flora 2,8.10^3/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
I2	-	-	-	-	-	-	-	-	-	NA
I5	-	-	-	-	-	-	-	-	-	NA
I8	-	-	-	-	-	-	-	-	-	NA
I12	-	-	-	-	-	-	-	-	-	NA
I13	-	-	-	-	-	-	-	-	-	NA
I16	-	-	-	-	-	-	-	-	-	NA
I22	-	-	-	-	-	-	-	-	-	NA
I24	-	-	-	-	-	-	-	-	-	NA
I3	+	+	+	+	+	+	+	+	+	PA
I6	+	+	+	+	+	+	+	+	+	PA
I10	+	+	+	+	+	+	+	+	+	PA
I11	+	+	+	+	+	+	+	+	+	PA
I14	+	+	+	+	+	+	+	+	+	PA
I18	+	+	+	+	+	+	+	+	+	PA
I21	+	+	+	+	+	+	+	+	+	PA
I23	+	+	+	+	+	+	+	+	+	PA
I1	+	+	+	+	+	+	+	+	+	PA
I4	+	+	+	+	+	+	+	+	+	PA
I7	+	+	+	+	+	+	+	+	+	PA
I9	+	+	+	+	+	+	+	+	+	PA
I15	+	+	+	+	+	+	+	+	+	PA
I17	+	+	+	+	+	+	+	+	+	PA
I19	+	+	+	+	+	+	+	+	+	PA
I20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: J

Aerobic mesophilic flora : 3,8.10^3/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
J2	-	-	-	-	-	-	-	-	-	NA
J5	-	-	-	-	-	-	-	-	-	NA
J8	-	-	-	-	-	-	-	-	-	NA
J12	-	-	-	-	-	-	-	-	-	NA
J13	-	-	-	-	-	-	-	-	-	NA
J16	-	-	-	-	-	-	-	-	-	NA
J22	-	-	-	-	-	-	-	-	-	NA
J24	-	-	-	-	-	-	-	-	-	NA
J3	+	+	+	+	+	+	+	+	+	PA
J6	+	+	+	+	+	+	+	+	+	PA
J10	+	+	+	+	+	+	+	+	+	PA
J11	+	+	+	+	+	+	+	+	+	PA
J14	+	+	+	+	+	+	+	+	+	PA
J18	+	+	+	+	+	+	+	+	+	PA
J21	+	+	+	+	+	+	+	+	+	PA
J23	+	+	+	+	+	+	+	+	+	PA
J1	+	+	+	+	+	+	+	+	+	PA
J4	+	+	+	+	+	+	+	+	+	PA
J7	+	+	+	+	+	+	+	+	+	PA
J9	+	+	+	+	+	+	+	+	+	PA
J15	+	+	+	+	+	+	+	+	+	PA
J17	+	+	+	+	+	+	+	+	+	PA
J19	+	+	+	+	+	+	+	+	+	PA
J20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: K

Aerobic mesophilic flora : $7,7.10^2$/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
K2	-	-	-	-	-	-	-	-	-	NA
K5	-	-	-	-	-	-	-	-	-	NA
K8	-	-	-	-	-	-	-	-	-	NA
K12	-	-	-	-	-	-	-	-	-	NA
K13	-	-	-	-	-	-	-	-	-	NA
K16	-	-	-	-	-	-	-	-	-	NA
K22	-	-	-	-	-	-	-	-	-	NA
K24	-	-	-	-	-	-	-	-	-	NA
K3	+	+	+	+	+	+	+	+	+	PA
K6	+	+	+	+	+	+	+	+	+	PA
K10	+	+	+	+	+	+	+	+	+	PA
K11	+	+	+	+	+	+	+	+	+	PA
K14	+	+	+	+	+	+	+	+	+	PA
K18	+	+	+	+	+	+	+	+	+	PA
K21	+	+	+	+	+	+	+	+	+	PA
K23	+	+	+	+	+	+	+	+	+	PA
K1	+	+	+	+	+	+	+	+	+	PA
K4	+	+	+	+	+	+	+	+	+	PA
K7	+	+	+	+	+	+	+	+	+	PA
K9	+	+	+	+	+	+	+	+	+	PA
K15	+	+	+	+	+	+	+	+	+	PA
K17	+	+	+	+	+	+	+	+	+	PA
K19	+	+	+	+	+	+	+	+	+	PA
K20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: L

Aerobic mesophilic flora : $2,0.10^3$/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
L2	-	-	-	-	-	-	-	-	-	NA
L5	-	-	-	-	-	-	-	-	-	NA
L8	-	-	-	-	-	-	-	-	-	NA
L12	-	-	-	-	-	-	-	-	-	NA
L13	-	-	-	-	-	-	-	-	-	NA
L16	-	-	-	-	-	-	-	-	-	NA
L22	-	-	-	-	-	-	-	-	-	NA
L24	-	-	-	-	-	-	-	-	-	NA
L3	+	+	+	+	+	+	+	+	+	PA
L6	+	+	+	+	+	+	+	+	+	PA
L10	+	+	+	+	+	+	+	+	+	PA
L11	+	+	+	+	+	+	+	+	+	PA
L14	+	+	+	+	+	+	+	+	+	PA
L18	+	+	+	+	+	+	+	+	+	PA
L21	+	+	+	+	+	+	+	+	+	PA
L23	+	+	+	+	+	+	+	+	+	PA
L1	+	+	+	+	+	+	+	+	+	PA
L4	+	+	+	+	+	+	+	+	+	PA
L7	+	+	+	+	+	+	+	+	+	PA
L9	+	+	+	+	+	+	+	+	+	PA
L15	+	+	+	+	+	+	+	+	+	PA
L17	+	+	+	+	+	+	+	+	+	PA
L19	+	+	+	+	+	+	+	+	+	PA
L20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: M

Aerobic mesophilic flora : 1,3.10^3/ml

Sample N°	Reference method ISO 11290-1						Alternative method : *Listeria* Precis			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
M2	-	-	-	-	-	-	-	-	-	NA
M5	-	-	-	-	-	-	-	-	-	NA
M8	-	-	-	-	-	-	-	-	-	NA
M12	-	-	-	-	-	-	-	-	-	NA
M13	-	-	-	-	-	-	-	-	-	NA
M16	-	-	-	-	-	-	-	-	-	NA
M22	-	-	-	-	-	-	-	-	-	NA
M24	-	-	-	-	-	-	-	-	-	NA
M3	+	+	+	+	+	+	+	+	+	PA
M6	+	+	+	+	+	+	+	+	+	PA
M10	+	+	+	+	+	+	+	+	+	PA
M11	+	+	+	+	+	+	+	+	+	PA
M14	+	+	+	+	+	+	+	+	+	PA
M18	+	+	+	+	+	+	+	+	+	PA
M21	+	+	+	+	+	+	+	+	+	PA
M23	+	+	+	+	+	+	+	+	+	PA
M1	+	+	+	+	+	+	+	+	+	PA
M4	+	+	+	+	+	+	+	+	+	PA
M7	+	+	+	+	+	+	+	+	+	PA
M9	+	+	+	+	+	+	+	+	+	PA
M15	+	+	+	+	+	+	+	+	+	PA
M17	+	+	+	+	+	+	+	+	+	PA
M19	+	+	+	+	+	+	+	+	+	PA
M20	+	+	+	+	+	+	+	+	+	PA

Laboratoire: ADRIA

Aerobic mesophilic flora1,2.10^3/ml

Sample N°	Reference method ISO 11290-1						Alternative method : Listeria PRECIS			Agreement Ref/Alt
	Fraser 1/2		Fraser		Confir-mation result	Final result	Typical colonies	Confir-mation	Final result	
	Palcam	*Brilliance* Listeria ISO	Palcam	*Brilliance* Listeria ISO						
N2	-	-	-	-	-	-	-	-	-	NA
N5	-	-	-	-	-	-	-	-	-	NA
N8	-	-	-	-	-	-	-	-	-	NA
N12	-	-	-	-	-	-	-	-	-	NA
N13	-	-	-	-	-	-	-	-	-	NA
N16	-	-	-	-	-	-	-	-	-	NA
N22	-	-	-	-	-	-	-	-	-	NA
N24	-	-	-	-	-	-	-	-	-	NA
N3	+	+	+	+	+	+	+	+	+	PA
N6	+	+	+	+	+	+	+	+	+	PA
N10	+	+	+	+	+	+	+	+	+	PA
N11	+	+	+	+	+	+	+	+	+	PA
N14	+	+	+	+	+	+	+	+	+	PA
N18	+	+	+	+	+	+	+	+	+	PA
N21	+	+	+	+	+	+	+	+	+	PA
N23	+	+	+	+	+	+	+	+	+	PA
N1	+	+	+	+	+	+	+	+	+	PA
N4	+	+	+	+	+	+	+	+	+	PA
N7	+	+	+	+	+	+	+	+	+	PA
N9	+	+	+	+	+	+	+	+	+	PA
N15	+	+	+	+	+	+	+	+	+	PA
N17	+	+	+	+	+	+	+	+	+	PA
N19	+	+	+	+	+	+	+	+	+	PA
N20	+	+	+	+	+	+	+	+	+	PA

APPENDIX H
Oxoid™ *Listeria* Precis™ Detection Method – 24LEB protocol

25 g of sample +
225 ml 24LEB-Listeria
One swab to 10 ml of 24LEB-Listeria
One sponge to 100 ml of 24LEB-Listeria
According ISO 6887

↓

37±1°C for 23±3 h

↓ *Possibility to store for 72 h at 5±3°C*

Streak 10µl onto Brilliance™ *Listeria* agar new formulation using a basic loop

↓

Typical colonies:
Blue colonies are presumptive positive *Listeria* species
Blue colonies with halo are presumptive positive *Listeria monocytogenes*

↓

Lateral flow test (*Listeria* spp or *Listeria monocytogenes*)

Or
A spot on Palcam
Or
Oxoid™ Microbact™ 12L biochemical galleries or equivalent

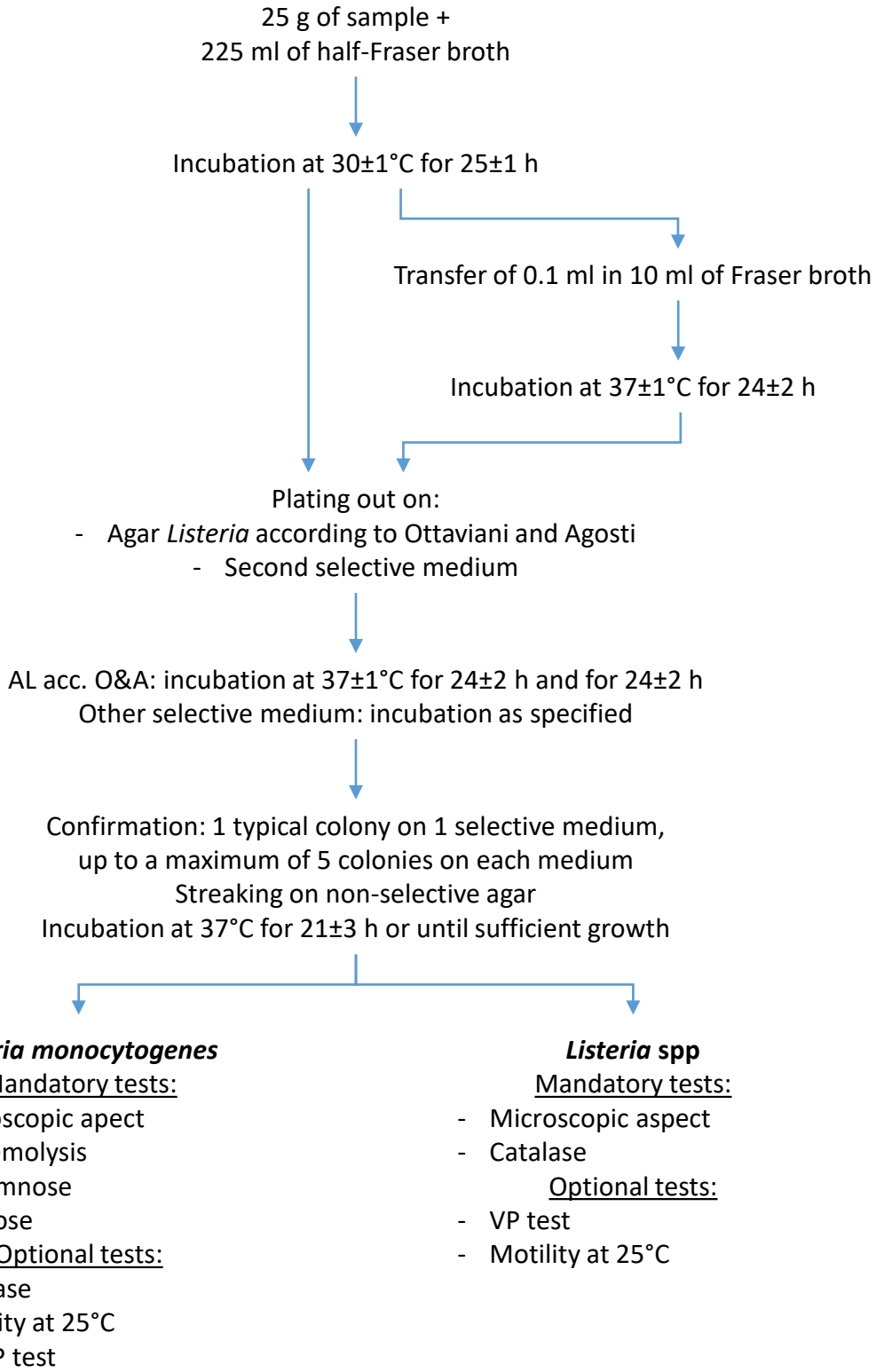
Or
EN ISO 11290:2017 confirmation procedure

Or
Any appropriate EN ISO 16140-6:2019 validated confirmation method
Or
SureTect™ Listeria species PCR Assay (or equivalent) according to the ISO 7218:2007

Or
Rhamnose test

APPENDIX I
EN ISO 11290-1:2017

Diagram of the procedure as described in the standard



Cat.	Type	Date	#	Matrix	Strain	Serovar	Reference	Origin	Injury protocol	Injury measurement	Inoculation level CFU/sample	Result
1	a	2022	2247840	Tabbouleh	*L.seeligeri*	/	ADTW22	Zucchini	Seeding 72 h at 2-8°C	/	2.8	+
1	a	2022	2333765	Piémontaise	*L.innocua*	/	XEN574	Salmon shell	Seeding 72 h at 2-8°C	/	2.6	+
1	a	2022	2333766	Salad, potatoes, tomato bacon	*L.innocua*	/	XEN574	Salmon shell	Seeding 72 h at 2-8°C	/	2.6	+
1	a	2022	2333767	Tuna salad, tomatoes, olives, parmesan	*L.welshimeri*	/	DCJ260	Pig's feet	Seeding 72 h at 2-8°C	/	3.0	+
1	a	2022	2333768	Cheese avocado sandwich	*L.welshimeri*	/	DCJ260	Pig's feet	Seeding 72 h at 2-8°C	/	3.0	+
1	a	2022	2333769	Quinoa salad, salmon, tomatoes	*L.welshimeri*	/	DCJ260	Pig's feet	Seeding 72 h at 2-8°C	/	3.0	+
1	a	2022	2333770	Ham and Comté cheese sandwich	*L.innocua*	/	XEN574	Salmon shell	Seeding 72 h at 2-8°C	/	2.6	+
1	a	2022	2319188	Vegetables wrap	*L.monocytogenes* + *L. seeligeri*	/	RJT457 + ADTW22	Wrap salmon Zucchini	Seeding 72 h at 2-8°C	/	1.0 +1.2	+
1	a	2022	2319189	Piémontaise	*L.monocytogenes*	4b	ALB748	Salmon tagliatel	Seeding 72 h at 2-8°C	/	1.8	+
1	a	2022	2319190	Penne pesto	*L.monocytogenes*	/	MRE888	Chocolate whipped cream waffle	Seeding 72 h at 2-8°C	/	1.0	+
1	b	2022	2333771	Pizza tomatoes olives, ham, cheese	*L.monocytogenes* + *L.innocua*	/	LUK409+ GZF268	Spring rolls with crab Croque monsieur	Seeding 72 h at 2-8°C	/	1.8+1.0	+
1	b	2022	2333772	Tomato goat cheese tart	*L.monocytogenes* + *L.innocua*	/	LUK409+ GZF268	Spring rolls with crab Croque monsieur	Seeding 72 h at 2-8°C	/	1.8+1.0	+
1	b	2022	2333773	Butternut cheddar bacon pie	*L.monocytogenes* + *L.innocua*	/	LUK409+ GZF268	Spring rolls with crab Croque monsieur	Seeding 72 h at 2-8°C	/	1.8+1.0	+
1	b	2022	2333775	Chicken tacos	*L.monocytogenes* + *L.welshimeri*	/	BVU991+ RYH463	Mixed saled Delicatessen	Seeding 72 h at 2-8°C	/	0.8+1.2	+
1	b	2022	2333776	Bacon cheese soufflé	*L.monocytogenes* + *L.welshimeri*	/	BVU991+ RYH463	Mixed saled Delicatessen	Seeding 72 h at 2-8°C	/	0.8+1.2	+
1	c	2022	2247790	Liquid egg	*L.innocua*	/	HQM372	Egg product environment swab	Seeding 72 h at 2-8°C	/	3.0	+
1	c	2022	2247903	Pastry with cream	*L.innocua*	/	RXJ222	Fig tartlet	Seeding 72 h at 2-8°C	/	1.2	+
1	c	2022	2247904	Pastry with coffe	*L.innocua*	/	RXJ222	Fig tartlet	Seeding 72 h at 2-8°C	/	1.2	+
1	c	2022	2247905	Pastry "Flan"	*L.innocua*	/	RXJ222	Fig tartlet	Seeding 72 h at 2-8°C	/	1.2	+
1	c	2022	2247906	Coconut flan	*L.innocua*	/	RXJ222	Fig tartlet	Seeding 72 h at 2-8°C	/	1.2	+
1	c	2022	2247907	Passion fruit pastry	*L.innocua*	/	RXJ222	Fig tartlet	Seeding 72 h at 2-8°C	/	1.2	+
1	c	2022	2319191	Mayonnaise	*L.monocytogenes*	/	BYM052	Mixed saled	Seeding 72 h at 2-8°C	/	0.8	+
1	c	2022	2319192	Pastry "Ile flottante"	*L.monocytogenes*	/	LVT655	Chocolate pasrty	Seeding 72 h at 2-8°C	/	1.6	+
1	c	2022	2319193	Mimosa egg	*L.monocytogenes*	/	BYM052	Mixed saled	Seeding 72 h at 2-8°C	/	0.8	+
2	b	2022	2333777	Meat gratin	*L.welshimeri*	/	YBK185	Raw pork meat	Seeding 72 h at 2-8°C	/	2.4	+
2	b	2022	2333778	Tripes	*L.welshimeri*	/	YBK185	Raw pork meat	Seeding 72 h at 2-8°C	/	2.4	+
2	b	2022	2333779	Cookeek beef	*L.welshimeri*	/	YBK185	Raw pork meat	Seeding 72 h at 2-8°C	/	2.4	+
2	b	2022	2333780	Rougail sausages	*L.ivanovii*	/	AAZ671	Creamy red fruits	Seeding 72 h at 2-8°C	/	3.0	+
2	b	2022	2333781	Chili con carne	*L.ivanovii*	/	AAZ671	Creamy red fruits	Seeding 72 h at 2-8°C	/	3.0	+
2	b	2022	2333782	Cookeed meat	*L.ivanovii*	/	AAZ671	Creamy red fruits	Seeding 72 h at 2-8°C	/	3.0	+
2	b	2022	2281477	Chicken quiche	*L.monocytogenes*	4b	ALB748	Salmon tagilatel	Seeding 72 h at 2-8°C	/	1.4	-
2	b	2022	2281479	Tripes	*L.monocytogenes*	4b	JBV888	Composite foods with tarama	Seeding 72 h at 2-8°C	/	1.8	-
3	b	2022	2247801	Raw milk	*L.innocua*	/	XKU847	Raw milk cheese	Seeding 72 h at 2-8°C	/	2.8	+
3	b	2022	2247802	Raw milk	*L.innocua*	/	RXL353	Raw milk cheese	Seeding 72 h at 2-8°C	/	2.2	+
3	b	2022	2247803	Raw milk	*L.innocua*	/	RXL353	Raw milk cheese	Seeding 72 h at 2-8°C	/	2.2	+
3	c	2022	2247804	Pasteurized cow's milk cheese (Cantal)	*L.innocua*	/	RXL353	Raw milk cheese	Seeding 72 h at 2-8°C	/	2.2	+

Appendix C - Artificial contaminations

Cat.	Type	Date	#	Matrix	Strain	Serovar	Reference	Origin	Injury protocol	Injury measurement	Inoculation level CFU/sample	Result
3	c	2022	2247805	Pasteurized sheep's milk cheese	*L.innocua*	/	RXL353	Raw milk cheese	Seeding 72 h at 2-8°C	/	2.2	+
3	c	2022	2247806	Organic pasteurized cow's milk cheese	*L.innocua*	/	RXL353	Raw milk cheese	Seeding 72 h at 2-8°C	/	2.2	+
3	c	2022	2247807	Pasteurized cow's milk cheese (Chamois d'Or)	*L.innocua*	/	RXL353	Raw milk cheese	Seeding 72 h at 2-8°C	/	2.2	+
3	c	2022	2247808	Pasteurized cow's milk cheese (Tomme)	*L.ivanovii*	/	GQD028	Environment	Seeding 72 h at 2-8°C	/	2.8	+
3	c	2022	2247810	Pasteurized cow's milk cheese (Fol Epi)	*L.ivanovii*	/	GQD028	Environment	Seeding 72 h at 2-8°C	/	2.8	+
3	c	2022	2247811	Pasteurized cow's milk cheese (Chaumes)	*L.ivanovii*	/	GQD028	Environment	Seeding 72 h at 2-8°C	/	2.8	+
4	a	2022	2247910	Salmon	*L.welshimeri*	/	TVP191	Salmon puff pastry	Seeding 72 h at 2-8°C	/	2.8	+
4	a	2022	2247911	Cod	*L.welshimeri*	/	TVP191	Salmon puff pastry	Seeding 72 h at 2-8°C	/	2.8	+
4	a	2022	2247912	Hake	*L.welshimeri*	/	TVP191	Salmon puff pastry	Seeding 72 h at 2-8°C	/	2.8	+
4	a	2022	2247913	Tuna	*L.welshimeri*	/	TVP191	Salmon puff pastry	Seeding 72 h at 2-8°C	/	2.8	+
4	a	2022	2247914	Filet of julienne	*L.welshimeri*	/	TVP191	Salmon puff pastry	Seeding 72 h at 2-8°C	/	2.8	+
4	a	2022	2319214	Raw salmon	*L.monocytogenes*	4b	JBV888	Composite foods with tarama	Seeding 72 h at 2-8°C	/	1.6	+
4	a	2022	2319215	Saithe fillet	*L.monocytogenes*	4b	JBV888	Composite foods with tarama	Seeding 72 h at 2-8°C	/	1.6	+
4	b	2022	2247813	Smoked salmon	*L.welshimeri*	/	AJP106	Salmon steak	Seeding 72 h at 2-8°C	/	3.0	+
4	b	2022	2247814	Smoked trout	*L.welshimeri*	/	AJP106	Salmon steak	Seeding 72 h at 2-8°C	/	3.0	+
4	b	2022	2247815	Smoked herring	*L.welshimeri*	/	AJP106	Salmon steak	Seeding 72 h at 2-8°C	/	3.0	+
4	b	2022	2247915	Smoked salmon	*L.innocua*	/	ABB472	Marinated salmon	Seeding 72 h at 2-8°C	/	2.6	+
4	b	2022	2247916	Smoked trut	*L.innocua*	/	ABB472	Marinated salmon	Seeding 72 h at 2-8°C	/	2.6	+
4	c	2022	2247816	Salmon cooked	*L.innocua*	/	RXY158	Shrimp shell	Seeding 48h 3°C±2°C	/	3	+
4	c	2022	2247917	Salad with shrimps	*L.innocua*	/	ABB472	Marinated salmon	Seeding 72 h at 2-8°C	/	2.6	+
4	c	2022	2247918	Salmon with sorrel	*L.innocua*	/	ABB472	Marinated salmon	Seeding 72 h at 2-8°C	/	2.6	+
4	c	2022	2247919	Prawn salad	*L.innocua*	/	ABB472	Marinated salmon	Seeding 72 h at 2-8°C	/	2.6	+
4	c	2022	2247920	St Jacques shell	*L.innocua*	/	ABB472	Marinated salmon	Seeding 72 h at 2-8°C	/	2.6	+
5	a	2022	2247921	Apple	*L.innocua*	/	GWC718	Environment	Seeding 72 h at 2-8°C	/	2.4	+
5	a	2022	2247924	Radish	*L.innocua*	/	GWC718	Environment	Seeding 72 h at 2-8°C	/	2.4	+
5	a	2022	2247925	Zucchini	*L.innocua*	/	GWC718	Environment	Seeding 72 h at 2-8°C	/	2.4	+
5	a	2022	2333609	Cucumbers with cream	*L.monocytogenes*	1/2a	XBB696	Frozen peeled broad beans	Seeding 72 h at 2-8°C	/	0.8	-
5	b	2022	2247817	Red peppers	*L.innocua*	/	TWH478	Mixed vegetables	Seeding 72 h at 2-8°C	/	2.2	+
5	b	2022	2247818	Zucchini sliced	*L.innocua*	/	TWH478	Mixed vegetables	Seeding 72 h at 2-8°C	/	2.2	+
5	b	2022	2247927	Sliced pinapple	*L.welshimeri*	/	TXR109	Chinese noodles with vegetables	Seeding 72 h at 2-8°C	/	1.6	+
5	b	2022	2247835	Gratted carot	*L.seeligeri*	/	ADTW22	Zucchini	Seeding 72 h at 2-8°C	/	2.8	+
5	b	2022	2247820	Cucumbers with cream	*L.welshimeri*	/	TLJ742	Vegetables	Seeding 72 h at 2-8°C	/	3.0	+
5	b	2022	2333616	beets	*L.monocytogenes*	/	BVU991	Mixed salad	Seeding 72 h at 2-8°C	/	2.0	+
5	b	2022	2333617	Mushrooms at the greek	*L.monocytogenes*	/	BXQ019	Cooked potatoes	Seeding 72 h at 2-8°C	/	2.6	+
5	c	2022	2247819	Tian vegetables	*L.welshimeri*	/	TLJ742	Vegetables	Seeding 72 h at 2-8°C	/	3.0	+
5	c	2022	2247841	Cauliflower gratin	*L.seeligeri*	/	TJM186	Vegetables - Collection strain	Seeding 72 h at 2-8°C	/	2.8	+
5	c	2022	2247842	Vegetables gratin	*L.seeligeri*	/	TJM186	Vegetables - Collection strain	Seeding 72 h at 2-8°C	/	2.8	+
5	c	2022	2247836	Ckickpea	*L.seeligeri*	/	ADTW22	Zucchini	Seeding 72 h at 2-8°C	/	2.8	+
5	c	2022	2247838	Couscous vegetables	*L.seeligeri*	/	ADTW22	Zucchini	Seeding 72 h at 2-8°C	/	2.8	+
5	c	2022	2247839	Cooked vegetables	*L.seeligeri*	/	ADTW22	Zucchini	Seeding 72 h at 2-8°C	/	2.8	+

Appendix C - Artificial contaminations

Cat.	Type	Date	#	Matrix	Strain	Serovar	Reference	Origin	Injury protocol	Injury measurement	Inoculation level CFU/sample	Result
5	c	2022	2333619	Pesto vegetables lasagna	*L.monocytogenes*	/	BXQ019	Cooked potatoes	Seeding 72 h at 2-8°C	/	2.6	+
5	c	2022	2333620	Vegetables gratin	*L.monocytogenes*	1/2a	XBB696	Frozen peeled broad beans	Seeding 72 h at 2-8°C	/	3.0	+
5	c	2022	2333621	Ratatouille	*L.monocytogenes*	1/2a	FCY076	Eggplant Gratin	Seeding 72 h at 2-8°C	/	1.8	+
5	c	2022	2333622	Vegetables galette	*L.monocytogenes*	1/2a	FCY076	Eggplant Gratin	Seeding 72 h at 2-8°C	/	1.8	+
6	a	2022	2247862	Process water cheese factory	*L.welshimeri*	/	RVG428	Plastic pallet	Seeding 72 h at 2-8°C	/	3.0	+
6	a	2022	2247863	Cheese line rinse water	*L.welshimeri*	/	RVG428	Plastic pallet	Seeding 72 h at 2-8°C	/	3.0	+
6	a	2022	2247864	Process water	*L.welshimeri*	/	RVG428	Plastic pallet	Seeding 72 h at 2-8°C	/	3.0	+
6	a	2022	2247866	Process water	*L.welshimeri*	/	RVG428	Plastic pallet	Seeding 72 h at 2-8°C	/	3.0	+
6	a	2022	2247832	Process water	*L.welshimeri*	/	BVP365	Wipe environment seafood products	Seeding 72 h at 2-8°C	/	3.0	+
6	a	2022	2247833	Process water	*L.monocytogenes*	/	BVP365	Wipe environment seafood products	Seeding 72 h at 2-8°C	/	3.0	+
6	a	2022	2247834	Process water	*L.monocytogenes*	/	BVP365	Wipe environment seafood products	Seeding 72 h at 2-8°C	/	3.0	+
6	a	2022	2247865	Process water	*L.welshimeri*	/	RVG428	Plastic pallet	Seeding 72 h at 2-8°C	/	3	-
6	b	2022	2247937	Dusts pastry industry	*L.welshimeri*	/	TKZ429	Wipe poultry crates	Spiking 30 min 60°C	0.7	1.2	+
6	b	2022	2247938	Dusts poultry industry	*L.welshimeri*	/	TKZ429	Wipe poultry crates	Spiking 30 min 60°C	0.7	1.2	+
6	b	2022	2247939	Dusts poultry industry	*L.welshimeri*	/	TKZ429	Wipe poultry crates	Spiking 30 min 60°C	0.7	1.2	+
6	b	2022	2247940	Dusts powder milk industry	*L.innocua*	/	GRR943	Environment	Spiking 30 min 60°C	0.9	2.6	+
6	b	2022	2247941	Dusts spicy packaging	*L.innocua*	/	GRR943	Environment	Spiking 30 min 60°C	0.9	2.6	+
6	b	2022	2247942	Dusts egg powder industry	*L.innocua*	/	GRR943	Environment	Spiking 30 min 60°C	0.9	2.6	+
6	b	2022	2333632	Poultry residues	*L.monocytogenes*	4b	RCJ280	Plain flour	Spiking 30 minutes at 55°C then 40 minutes at -20°C	0.9	0.6	-

APPENDIX K - SENSITIVITY STUDY - RAW RESULTS

Bacterial burden	*Distribution of flora*
Ø: no culture	A = pure culture of suspect colonies
L = low	B = mixture with a majority of suspect colonies
M = moderate	C = mixture with a minority of suspect colonies
H = high	D = mixture with rare suspect colonies
/: not realized	E = absence of suspect colonies
	(x): x colonies characteristic if x ≤ 5

PA: positive agreement
NA: negative agreement
ND: negative deviation
PD: positive deviation
PPNA: positive presumptive negative agreement
PPND : positive presumptive negative deviation
/: not realized

Cat	Type	#	Sample	Contamination						ISO 11290-1•							Listeria Precis L.spp - 24 LEB 20h at 37°C								Listeria Precis *L.spp* 24 LEB 72h 2-8°C				Brilliance 72h at 2-8°C		
										O&A	Palcam	Fraser tube		Conf.		Result *L.spp*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement		Result	Agreement
				Type	Strain	Ref	Stress	Stress level	Inoc. level			O&A	Palcam	CAMP Test if necessary	Identification																	
1	a	2247840	Tabbouleh	ac	*L.seeligeri*	ADTW22	Seeding	/	2.8	∅	∅	∅	∅	/	/	A	DL ø halo	*L.seeligeri*	*L.seeligeri*	+	+	P	PD	O&A: AM / PAL: AM *L.seeligeri*	AL ø halo	*L.seeligeri*	P	PD	DL ø halo	P	PD
1	a	2317055	Salad with beef	nc	/	/	/	/	/	EL	EL	∅	∅	/	/	A	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*	AM halo	*L.mono*	P	PD	AM halo	P	PD
1	a	2333765	Piémontaise	ac	*L.innocua*	XEN574	Seeding	/	2.6	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	*L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
1	a	2333766	Salad, potatoes, tomatoes, bacon	ac	*L.innocua*	XEN574	Seeding	/	2.6	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	*L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
1	a	2333767	Salad with tuna, tomatoes, cheese	ac	*L.welshimeri*	DCJ260	Seeding	/	3.0	EL	EL	EL	EL	/	/	A	BM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	*L.welshimeri*	AM ø halo	*L.welsh*	P	PD	BM ø halo	P	PD
1	a	2333768	Cheese avocado sandwich	ac	*L.welshimeri*	DCJ260	Seeding	/	3.0	BL ø halo	BL	BL ø halo	AM	/	*L.welshimeri*	P	BM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	*L.welshimeri*	AM ø halo	*L.welsh*	P	PA	BM ø halo	P	PA
1	a	2333769	Quinoa salad, salmon, tomatoes	ac	*L.welshimeri*	DCJ260	Seeding	/	3.0	EM	EM	AM ø halo	AH	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	*L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
1	a	2333770	Ham and Comté cheese sandwich	ac	*L.innocua*	XEN574	Seeding	/	2.6	AM ø halo	AM	AH ø halo	AH	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	*L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
1	a	2319188	Vegetables wrap	ac	*L. mono + L. seeligeri*	RJT457 ADTW22	Seeding	/	1.0 +1.2	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	∅	/	/	/	/	A	ND	O&A:ø - Pal:ø	∅	/	A	ND	∅	A	ND
1	a	2319189	Piémontaise	ac	*L. mono*	ALB748	Seeding	/	1.8	∅	∅	∅	∅	/	/	A	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*	AM halo	*L.mono*	P	PD	AM halo	P	PD
1	a	2319190	Penne pesto	ac	*L. mono*	MRE888	Seeding	/	1.0	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	BM halo	*L.mono*	P	PA	BM halo	P	PA
1	a	2319249	Pasta sald	/	/	/	/	/	/	EL	EL	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	∅	A	NA
1	a	2319250	Piémontaise	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	∅	A	NA
1	a	2319251	Chicken sandwich	/	/	/	/	/	/	EL	EH	EL	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
1	a	2319252	Sandwich poulet sauce curry	/	/	/	/	/	/	∅	EM	∅	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	A	NA	EL	A	NA
1	a	2319253	Mixed vegetables	/	/	/	/	/	/	∅	EM	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
1	a	2319254	Tabbouleh	/	/	/	/	/	/	EL	EL	∅	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
1	a	2319269	Wrap	/	/	/	/	/	/	EL	EL	EL	EM	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
1	a	2319270	Piémontaise	/	/	/	/	/	/	∅	∅	EL	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
1	a	2319289	Chicken and curry sandwich	/	/	/	/	/	/	EL	EL	∅	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	A	NA	∅	A	NA
1	a	2319290	Tuna and rice salad	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	EL	A	NA
1	b	2333771	Tomatoes, ham and cheese pizza	ac	*L.mono + L.innocua*	LUK409+GZF268	Seeding	/	1.8+1.0	AM ø halo+AL halo	AM	AM ø halo+AL halo	AM	/	*L.mono+L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	*L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
1	b	2333772	Tomato goat cheese tart	ac	*L.mono + L.innocua*	LUK409+GZF268	Seeding	/	1.8+1.0	AM ø halo+AL halo	AM	AM ø halo+AL halo	AM	/	*L.mono+L.innocua*	P	AM ø halo + AL halo	*L.mono+L.innocua*	*L.mono+L.innocua*	+/+	+	P	PA	*L.mono+L.innocua*	AM ø halo + AL halo	*L.mono+L.innocua*	P	PA	AM ø halo + AL halo	P	PA
1	b	2333773	Butternut cheddar bacon pie	ac	*L.mono + L.innocua*	LUK409+GZF268	Seeding	/	1.8+1.0	AL ø halo+AM halo	AM	AL ø halo+AM halo	AM	/	*L.mono+L.innocua*	P	AH ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	*L.innocua*	AH ø halo	*L.innocua*	P	PA	AH ø halo	P	PA
1	b	2333775	Chicken tacos	ac	*L.mono + L.welsh.*	BVU991+RYH463	Seeding	/	0.8+1.2	AL ø halo	EL	AL ø halo	AL	/	*L.welshimeri*	P	AL halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AL halo	*L.mono*	P	PA	AL halo	P	PA
1	b	2333776	Bacon cheese soufflé	ac	*L.mono + L.welsh.*	BVU991+RYH463	Seeding	/	0.8+1.2	AM ø halo+AM halo	BM	AM ø halo+AM halo	BM	/	*L.mono+L.welshimeri*	P	DL ø halo + AH halo	*L.mono+L.welsh*	*L.mono+L.welsh*	+/+	+	P	PA	*L.mono+L.welsh*	DL ø halo + AH halo	*L.mono+L.welsh*	P	PA	DL ø halo + AH halo	P	PA
1	b	2281373	Pizza Regina	nc	/	/	/	/	/	DL	DL	AM halo	AM	/	*L.monocytogenes*	P	BL halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	BL halo	*L.mono*	P	PA	BL halo	P	PA
1	b	2281374	Pizza vege	nc	/	/	/	/	/	EL	EL	AM halo	AM	/	*L.monocytogenes*	P	EL	/	/	/	/	A	ND	O&A:ø - Pal:ø	EL	/	A	ND	EL	A	ND
1	b	2281375	Pizza Regina	nc	/	/	/	/	/	EL	EL	∅	EL	/	/	A	BL halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*	BL halo	*L.mono*	P	PD	BL halo	P	PD
1	b	2281376	Cooked rice	nc	/	/	/	/	/	AL halo	AL	AM halo	AM	/	*L.monocytogenes*	P	AL halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AL halo	*L.mono*	P	PA	AL halo	P	PA
1	b	2281377	Accra	nc	/	/	/	/	/	AH halo	AH	AM halo	AM	/	*L.monocytogenes*	P	AH halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AH halo	*L.mono*	P	PA	AH halo	P	PA
1	b	2281378	Accra	nc	/	/	/	/	/	AH halo	AH	AM halo	AM	/	*L.monocytogenes*	P	AH halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AH halo	*L.mono*	P	PA	AH halo	P	PA
1	b	2319255	Bolognese	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
1	b	2319256	Croque monsieur	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
1	b	2319257	Burger	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
1	b	2319271	Tortillas, potatoes, onions	/	/	/	/	/	/	∅	∅	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
1	b	2319291	Mushroom puff pastry	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
1	b	2319292	Honey goat cheese bruschetta	/	/	/	/	/	/	EM	EM	∅	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	EL	A	NA
1	b	2319293	Pizza	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	EM	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	A	NA	EM	A	NA
1	b	2236737	Pepper chicken pizza	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EL	/	A	NA	∅	A	NA
1	b	2236739	Kebab chicken panini	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	A	NA	∅	A	NA
1	b	2263657	Pizza with salmon	/	/	/	/	/	/	EM	EL	EL	∅	/	/	A	EM	/	/	/	/	A	NA	O&A:ø Pal:ø	EM	/	A	NA	EM	A	NA
1	c	2247790	Liquid egg	ac	*L.innocua*	HQM372	Seeding	/	3.0	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
1	c	2247903	Pastry with cream	ac	*L.innocua*	RXJ222	Seeding	/	1.2	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
1	c	2247904	Pastry with coffe	ac	*L.innocua*	RXJ222	Seeding	/	1.2	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
1	c	2247905	Pastry (Flan)	ac	*L.innocua*	RXJ222	Seeding	/	1.2	AH ø halo	AM	AH ø halo	AM	/	*L.innocua*	P	ø	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅	ø	/	A	ND	ø	A	ND
1	c	2247906	Coconut flan	ac	*L.innocua*	RXJ222	Seeding	/	1.2	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AH ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AH ø halo	P	PA
1	c	2247907	Passion fruit pastry	ac	*L.innocua*	RXJ222	Seeding	/	1.2	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AH ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AH ø halo	*L.innocua*	P	PA	AH ø halo	P	PA
2	c	2281348	Pastry with cream	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
1	c	2319191	Mayonnaise	ac	*L. mono*	BYM052	Seeding	/	0.8	BM halo	BM	BM halo	BM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
1	c	2319192	Pastry "Ile flottante"	ac	*L. mono*	LVT655	Seeding	/	1.6	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
1	c	2319193	Mimosa egg	ac	*L. mono*	BYM052	Seeding	/	0.8	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
1	c	2247908	Chocolate pastry	/	/	/	/	/	/	ø	EL	ø	EM	/	/	A	EL	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EM	/	/	/	EL	A	NA
1	c	2247762	Pastry (Forêt noire)	/	/	/	/	/	/	EM	EM	EL	EL	/	/	A	EM	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EM	/	/	/	EM	A	NA
1	c	2247763	3 chocolate pastry	/	/	/	/	/	/	EM	EM	EL	EL	/	/	A	EM	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EM	/	/	/	EM	A	NA
1	c	2247764	Raspberry tartlet	/	/	/	/	/	/	EM	EM	∅	EL	/	/	A	DL ø halo (doubt)	/	TSAYE: nc catalase -	-	/	A (PP)	NA (PP)	O&A: ∅ / PAL: ∅	EL	/	/	/	EL	A	NA
1	c	2247765	White chocolate tartlet	/	/	/	/	/	/	EM	EM	EL	EL	/	/	A	EL	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EL	/	/	/	EL	A	NA
1	c	2247766	Banana pastry	/	/	/	/	/	/	EM	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EL	/	/	/	EL	A	NA
1	c	2247767	Pistachio pastry	/	/	/	/	/	/	EM	EM	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EL	/	/	/	EL	A	NA
1	c	2319273	Pastry with withe chocolate	/	/	/	/	/	/	EL	EL	EH	EH	/	/	A	EM	/	/	/	/	A	NA	/	EM	/	/	/	EM	A	NA
1	c	2319274	Liquid egg	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	/	∅	/	/	/	∅	A	NA
1	c	2318981	Mimosa egg	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	/	∅	/	/	/	∅	A	NA

Category	Type	#	Sample	Contamination						ISO 11290-1*						Result *L.spp*	Listeria Precis L.spp - 24 LEB 20h at 37°C								Listeria Precis *L.spp* 24 LEB 72h 2-8°C				Brilliance 72h at 2-8°C	Result	Agreement
				Type	Strain		Stress	Stress level	Inoc. level	O&A	Palcam	Fraser tube		Conf.			Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement			
												O&A	Palcam	CAMP Test If necessary	Identification																	
2	a	2231978	Duck liver	nc	/	/	/	/	/	AL ø halo	BL	AM ø halo	AM	/	*L.innocua*	P	AH ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	CH ø halo	*L.innocua*	P	PA	AH ø halo	P	PA
2	a	2236736	Raw chicken leg	nc	/	/	/	/	/	∅	∅	∅	∅	/	/	A	AL ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*	AL ø halo	*L.welshimeri*	P	PD	AL ø halo	P	PD
2	a	2317052	Sheep ore	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
2	a	2319196	Raw pork meat	nc	/	/	/	/	/	AL halo (1)	∅	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
2	a	2319197	Pork belly	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
2	a	2319198	Filet mignon of pork	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
2	a	2319263	Turkey	nc	/	/	/	/	/	BM halo	BM	CM halo	BM	/	*L.monocytogenes*	P	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	BM halo	P	PA
2	a	2231979	Pork meat	nc1	/	/	/	/	/	∅	EL	∅	EL	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: EL	∅	/	A	NA	∅	A	NA
2	a	2281386	Duck filet	nc	/	/	/	/	/	BL halo + BL ø halo	AM	AL halo (3) / AM ø halo	AM	/	*L.mono + L.innocua*	P	DL halo (4) / AM ø halo	*L.mono + L.innocua*	*L.mono + L.innocua*	+/+	+	P	PA	*L.mono + L.innocua*	BL halo / AM ø halo	*L.mono + L.innocua*	P	PA	DL halo (4) / AM ø halo	P	PA
2	a	2281390	Ground beef meat	nc	/	/	/	/	/	DL ø halo	DL	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	*L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
2	a	2281392	Ground beef meat	nc	/	/	/	/	/	AM ø halo	AM	AL halo / AM ø halo	AM	/	*L.mono + L.innocua*	P	AL halo + AM ø halo	*L.mono + L.innocua*	*L.mono + L.innocua*	+/+	+	P	PA	*L.mono + L.innocua*	AL halo + AM ø halo	*L.mono + L.innocua*	P	PA	AL halo + AM ø halo	P	PA
2	a	2281395	Raw rooster	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	∅	/	/	/	/	A	ND	O&A:ø - Pal:ø	∅	/	A	ND	∅	A	ND
2	a	2231980	Beef carpaccio	/	/	/	/	/	/	∅	EL	∅	EL	/	/	A	DL ø halo (doubt)	/	TSAYE: nc Catalase -	-	/	A (PP)	NA (PP)	O&A: ∅ / PAL: ∅	∅	/	A	NA	EL	A	NA
2	a	2236735	Raw lamb meat	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	A	NA	∅	A	NA
2	a	2263646	Pork chop	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	A	NA	∅	A	NA
2	a	2263647	Beef chope	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	A	NA	∅	A	NA
2	a	2319329	Beeh chope	/	/	/	/	/	/	∅	∅	EL	EL	/	/	A	∅	/	/	/	/	A	NA		∅	/	A	NA	∅	A	NA
2	a	2316939	Raw rabbit	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
2	a	2281393	Beef carpacio	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EL	A	NA
2	a	2281394	Raw chicken	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
2	a	2263647	Beef chope	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
2	b	2317054	Cooked beef batch 1	nc	/	/	/	/	/	AL halo	AL	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
2	b	2319200	Cooked beef batch 2	nc	/	/	/	/	/	AL halo (2)	AL	AM halo	AM	/	*L.monocytogenes*	P	AL halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AL halo	*L.mono*	P	PA	AL halo	P	PA
2	b	2319276	Mexican chicken	nc	/	/	/	/	/	CM halo	CM	AH halo	AH	/	*L.monocytogenes*	P	BH halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	BH halo	P	PA
2	b	2333777	Meat gratin	ac	*L.welsh*	YBK185	Seeding	/	2.4	BM ø halo	BM	BM ø halo	BM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
2	b	2333778	Meat (Tripes)	ac	*L.welsh*	YBK185	Seeding	/	2.4	AL ø halo	AL	AL ø halo	AL	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
2	b	2333779	Cookeed beef	ac	*L.welsh*	YBK185	Seeding	/	2.4	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
2	b	2333780	Cooked sausages	ac	*L.ivanovii*	AAZ671	Seeding	/	3.0	AM halo	AL	AM halo	AL	/	*L.ivanovii*	P	AL halo	*L.ivanovii*	*L.ivanovii*	+	+	P	PA	O&A: AM / PAL: AM *L.ivanovii*	AM halo	*L.ivanovii*	P	PA	AL halo	P	PA
2	b	2333781	Chili con carne	ac	*L.ivanovii*	AAZ671	Seeding	/	3.0	AL halo	AL	AL halo	AL	/	*L.ivanovii*	P	AL halo	*L.ivanovii*	*L.ivanovii*	+	+	P	PA	O&A: AL / PAL: BL *L.ivanovii*	AM halo	*L.ivanovii*	P	PA	AL halo	P	PA
2	b	2333782	Pie	ac	*L.ivanovii*	AAZ671	Seeding	/	3.0	AL halo	AL	AL halo	AL	/	*L.ivanovii*	P	BM halo	*L.ivanovii*	*L.ivanovii*	+	+	P	PA	O&A: AL / PAL: BL *L.ivanovii*	BM halo	*L.ivanovii*	P	PA	BM halo	P	PA
2	b	2347806	Pulled cooked duck			/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
2	b	2319294	Hachis parmentier	/	/	/	/	/	/	EM	EM	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
2	b	2319295	Ox muzzle	/	/	/	/	/	/	EL	EL	EL	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:EL	EL	/	A	NA	EL	A	NA
2	b	2319296	Cooked pork	/	/	/	/	/	/	EL	EL	∅	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:EL - Pal:EL	EL	/	A	NA	EL	A	NA
2	b	2319297	Chili con carne	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
2	b	2319298	Beef tongue	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
2	b	2319327	Cooked turkey	/	/	/	/	/	/	∅	∅	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:EL - Pal:EM	EL	/	A	NA	∅	A	NA
2	b	2319328	Meat (Tripes)	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
2	b	2281477	Chicken quiche	ac	*L. mono*	ALB748	Seeding	/	1.4	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	/	/	A	NA	EL	A	NA
2	b	2281479	Meat (Tripes)	ac	*L. mono*	JBV888	Seeding	/	1.8	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	AL(3) halo	*L.mono*	P	PD	∅	A	NA
2	b	2319275	Cooked turkey	/	/	/	/	/	/	∅	EL	EL	EM	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	/	/	A	NA	EL	A	NA
2	c	2231981	Ground pork meat	nc	/	/	/	/	/	∅	∅	AL ø halo	AL	/	*L.welshimeri*	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅	∅	/	A	ND	∅	A	ND
2	c	2231983	Ground poultry meat	nc	/	/	/	/	/	AL halo/AL ∅ halo	AL	DL halo/AL ∅ halo	AL	/	*L.innocua + L. mono*	P	AH ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM	*L.innocua*	P	PA	AH ø halo	P	PA
2	c	2231984	Poultry merguez	nc	/	/	/	/	/	EL	EL	∅	EL	/	/	A	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PD	O&A: AM / PAL: AM *L.innocua*	AM	*L.innocua*	P	PD	AM ø halo	P	PD
2	c	2231986	Delicatessen (Boudin blanc)	nc	/	/	/	/	/	AL ø halo	EL	AL	EL	/	*L.welshimeri*	P	AH ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM	*L.welsh*	P	PA	AH ø halo	P	PA
2	c	2236687	Foie gras	nc	/	/	/	/	/	∅	EL	EL	EL	/	/	A	BL ø halo	*L.innocua*	*L.innocua*	+	+	P	PD	O&A: AM / PAL: AM *L.innocua*	AM	*L.innocua*	P	PD	BL ø halo	P	PD
2	c	2236689	Delicatessen (Boudin noir)	nc	/	/	/	/	/	∅	EL	∅	EL	/	/	A	AH ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*	AM	*L.welsh*	P	PD	AH ø halo	P	PD
2	c	2236732	Ground pork meat	nc	/	/	/	/	/	AL ø halo	AL	AM ø halo	BM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM	*L.innocua*	P	PA	AM ø halo	P	PA
2	c	2236733	Ground chicken meat	nc	/	/	/	/	/	DL ø halo	DL	AM ø halo	AM	/	*L.innocua*	P	AL ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AL	*L.innocua*	P	PA	AL ø halo	P	PA
2	c	2236738	Delicatessen (Boudin blanc)	nc	/	/	/	/	/	AL ø halo	AL	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM	*L.welsh*	P	PA	AM ø halo	P	PA

Meat products

Category	Type	#	Sample	Contamination						ISO 11290-1▪							Listeria Precis L.spp - 24 LEB 20h at 37°C								Listeria Precis *L.spp* 24 LEB 72h 2-8°C				Brilliance 72h at 2-8°C	Result	Agreement
				Type	Strain		Stress	Stress level	Inoc. level	O&A	Palcam	Fraser tube		Conf.		Result *L.spp*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement			
												O&A	Palcam	CAMP Test If necessary	Identification																
2	c	2247761	Smoked bacon	nc	/	/	/	/	/	DM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM	*L.welsh*	P	PA	AM ø halo	P	PA
2	c	2236688	Liver pate	/	/	/	/	/	/	∅	EL	∅	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:EL / PAL:EM	EL	/	/	/	∅	A	NA
2	c	2231985	Delicatessen	/	/	/	/	/	/	∅	EL	∅	EL	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
2	c	2231982	Duck sausage	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
2	c	2236734	Merguez	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
2	c	2316958	Duck liver mousse	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	EL	A	NA
2	c	2316959	Rabbit pâté	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
2	c	2316960	Forest pâté	/	/	/	/	/	/	EL	EM	∅	EL	/	/	A	EM	/	/	/	/	A	NA	O&A:ø - Pal:EL	EM	/	/	/	EM	A	NA
2	c	2281404	Ground meat pork-veal	/	/	/	/	/	/	EM	EM	∅	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EL	A	NA
2	c	2281405	Sausage with herbs	/	/	/	/	/	/	EL	EL	EL	EL	/	/	A	EM	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	/	/	EM	A	NA
2	c	2316935	Bacon crisp	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA

Cat	Type	#	Sample	Contamination						ISO 11290-1•						Listeria Precis L.spp - 24 LEB 20h at 37°C							Listeria Precis *L.spp* 24 LEB 72h 2-8°C				Brilliance 72h at 2-8°C	Result	Agreement
				Type	Strain		Stress	Stress level	Inoc. level	O&A	Palcam	Fraser tube		Conf.		Result *L.spp*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement			
												O&A	Palcam	CAMP Test If necessary	Identification															
3	a	2236690	Raw cow's milk cheese "Abondance"	nc	/	/	/	/	/	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅	AL ø halo	*L.innocua*	P	PA	∅	A	ND
3	a	2236692	Raw cow's milk cheese "tomme"	nc	/	/	/	/	/	AM ø halo	AM	BM ø halo	BM	/	*L.innocua*	P	AM	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM	P	PA
3	a	2236694	Raw cow's milk cheese "tomme"	nc	/	/	/	/	/	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM	P	PA
3	a	2247769	Raw milk cheese "Brie"	nc	/	/	/	/	/	BM	AM	AM	AM	/	*L.grayi*	P	AM	*L.grayi*	*L.grayi*	+	+	P	PA	O&A: AM / PAL: AM *L.grayi*	AM ø halo	*L.grayi*	P	PA	AM	P	PA
3	a	2281432	Raw milk cheese "Brie"	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
3	a	2281435	Raw milk cheese "Pont l'Evêque"	nc	/	/	/	/	/	AM halo	AL	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
3	a	2281468	Raw cow's milk cheese "tomme"	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	BM halo	*L.mono*	P	PA	BM halo	P	PA
3	a	2281469	Raw cow's milk cheese "tomme"	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AL halo	*L.mono*	P	PA	AM halo	P	PA
3	a	2281472	Cottage cheese with raw milk	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
3	a	2319209	Raw cow's milk cheese "tomme de Savoie"	nc	/	/	/	/	/	AM halo + AL ∅ halo	AM	AM halo + AM ∅ halo	AM	/	*L.mono + L.innocua*	P	AM halo + BL ∅ halo	*L.mono + L.innocua*	*L.mono + L.innocua*	+/+	+	P	PA	*L.mono + L.innocua*	BM halo + BM ∅ halo	*L.mono + L.innocua*	P	PA	AM halo + BL ∅ halo	P	PA
3	a	2316947	Raw milk cheese "brie"	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:EL	EM	EM	A	NA	∅	A	NA
3	a	2319277	Raw milk cheese "Normanville"	/	/	/	/	/	/	∅	∅	EM	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	/	/	EL	A	NA
3	a	2319278	Raw milk cheese	/	/	/	/	/	/	∅	EL	EM	EM	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	/	/	EL	A	NA
3	a	2319279	Raw milk cheese " Tomme"	/	/	/	/	/	/	EL	EL	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:EL - Pal:EL	EM	/	/	/	∅	A	NA
3	a	2236695	Raw goat milk cheese	/	/	/	/	/	/	EL	∅	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
3	a	2236691	Raw ewe milk cheese "Abondance"	/	/	/	/	/	/	EL	EL	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
3	a	2247770	Raw milk cheese "Meule"	/	/	/	/	/	/	EM	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EL	/	/	/	EL	A	NA
3	a	2263639	Raw milk cheese "Bethmale"	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	EM	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EM	/	/	/	EM	A	NA
3	a	2263640	Raw cow's milk cheese "tomme"	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
3	a	2263641	Goat milk cheese	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
3	b	2247768	Cottage cheese with raw milk	nc	/	/	/	/	/	DM	DM	AM	AM	/	*L.innocua*	P	AL ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AL ø halo	P	PA
3	b	2247796	Raw milk	nc	/	/	/	/	/	AM ø halo	AL ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
3	b	2247801	Raw milk	ac	*L.innocua*	XKU847	Seeding	/	2.8	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
3	b	2247802	Raw milk	ac	*L.innocua*	RXL353	Seeding	/	2.2	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
3	b	2247803	Raw milk	ac	*L.innocua*	RXL353	Seeding	/	2.2	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
3	b	2333624	White cheese farm with raw milk	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
3	b	2281431	Raw milk cream	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
3	b	2319212	Raw farm cow's milk	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
3	b	2333623	Raw cow's milk	nc	/	/	/	/	/	AM halo	BM	AM halo	AM	/	*L.monocytogenes*	P	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	BM halo	*L.mono*	P	PA	BM halo	P	PA
3	b	2318988	Raw cow's milk	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	EL	/	/	/	/	A	ND	O&A:ø - Pal:ø	EL	/	A	ND	EL	A	ND
3	b	2236693	Cottage raw milk cheese	/	/	/	/	/	/	EL	EL	EL	EL	/	/	A	EL	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EL	/	/	/	EL	A	NA
3	b	2319330	Raw goat's milk	/	/	/	/	/	/	EL	EL	EL	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EL	A	NA
3	b	2319334	Cream with raw milk	/	/	/	/	/	/	EL	EM	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
3	b	2319335	Raw cow's milk	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
3	b	2318887	Raw cow's milk	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	∅	A	NA
3	b	2318888	Raw cow's milk	/	/	/	/	/	/	∅	EL	∅	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	/	/	EL	A	NA
3	b	2318889	Cream with raw milk	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EL	A	NA
3	b	2318989	Faisselle with raw sheep's milk	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	∅	A	NA
3	b	2318990	Raw milk cheese yogurt	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
3	b	2318990	Butter with raw milk	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
3	c	2236696	Pasteurized cow's milk cheese (Baskeria)	nc	/	/	/	/	/	AL ø halo	CL	AM ø halo	AM	/	*L.innocua*	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅	∅	/	A	ND	∅	A	ND
3	c	2236697	Pasteurized cow's milk cheese (Brie)	nc	/	/	/	/	/	AM ø halo	AM	BM ø halo	BM	/	*L.innocua*	P	AM	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM	P	PA
3	c	2236698	Pasteurized cow's milk cheese (Tomme)	nc	/	/	/	/	/	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM	P	PA
3	c	2247804	Pasteurized cow's milk cheese (Cantal)	ac	*L.innocua*	RXL353	Seeding	/	2.2	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
3	c	2247805	Pasteurized sheep's milk cheese	ac	*L.innocua*	RXL353	Seeding	/	2.2	BM ø halo	BM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	EM	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅	EM	/	A	ND	EM	A	ND

Cat	Type	#	Sample	Contamination						ISO 11290-1•							Listeria Precis L.spp - 24 LEB 20h at 37°C								Listeria Precis *L.spp* 24 LEB 72h 2-8°C				Brilliance 72h at 2-8°C	Result	Agreement
				Type	Strain		Stress	Stress level	Inoc. level	O&A	Palcam	Fraser tube		Conf.		Result *L.spp*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement			
												O&A	Palcam	CAMP Test If necessary	Identification																
3	c	2247806	Organic pasteurized cow's milk cheese	ac	*L.innocua*	RXL353	Seeding	/	2.2	AL ø halo	AL ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
3	c	2247807	Pasteurized cow's milk cheese (Chamois d'Or))	ac	*L.innocua*	RXL353	Seeding	/	2.2	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
3	c	2247808	Pasteurized cow's milk cheese (Tomme)	ac	*L.innocua*	RXL353	Seeding	/	2.2	EM	∅	EM	∅	/	/	A	AL avec halo	*L.ivanovii*	*L.ivanovii*	+	+	P	PD	O&A: AM halo/ PAL: AM halo *L.ivanovii*	AL halo	*L.ivanovii*	P	PD	AL avec halo	P	PD
3	c	2247810	Pasteurized cow's milk cheese (Fol Epi)	ac	*L.ivanovii*	GQD028	Seeding	/	2.8	AL halo	∅	AL avec halo	∅	/	*L.ivanovii*	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅	∅	/	A	ND	∅	A	ND
3	c	2247811	Pasteurized cow's milk cheese (Chaumes)	ac	*L.ivanovii*	GQD028	Seeding	/	2.8	∅	∅	∅	∅	/	/	A	AM avec halo	*L.ivanovii*	*L.ivanovii*	+	+	P	PD	O&A: AM halo/ PAL: AM halo *L.ivanovii*	AM halo	*L.ivanovii*	P	PD	AM avec halo	P	PD
3	c	2263648	Pasteurized goat milk cheese	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	EM	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EM	/	A	/	EM	A	NA
3	c	2263649	Pasteurized cow's milk cheese (Tomme)	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EL	/	/	/	∅	A	NA
3	c	2263650	Pasteurized cow's milk cheese (St Marcellin)	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
3	c	2263651	Pasteurized milk rice	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
3	c	2236699	Pasteurized ewe milk cheese	/	/	/	/	/	/	EL	∅	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:EL / PAL:EM	∅	/	/	/	∅	A	NA
3	c	2236700	Pasteurized goat milk cheese	/	/	/	/	/	/	EL	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
3	c	2236701	Pasteurized cow's milk cheese (Tomme)	/	/	/	/	/	/	EL	EM	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
3	c	2247809	Pasteurized sheep's milk cheese	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	A	NA
3	c	2319280	Pasteurized milk cheese " St Nectaire"	/	/	/	/	/	/	∅	∅	∅	EM	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	/	/	EL	A	NA
3	c	2319281	Pasteurized milk cheese " Reblochon"	/	/	/	/	/	/	∅	EL	EH	EM	/	/	A	EL	/	/	/	/	A	NA	O&A:EL - Pal:EL	EL	/	/	/	EL	A	NA

Cat	Type	#	Sample	Contamination						ISO 11290-1*						Listeria Precis L.spp - 24 LEB 20h at 37°C								Listeria Precis *L.spp* 24 LEB 72h 2-8°C						
										O&A	Palcam	Fraser tube		Conf.		Result *L.spp*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement	Brilliance 72h at 2-8°C	Result	Agreement
				Type	Strain		Stress	Stress level	Inoc. level			O&A	Palcam	CAMP Test If necessary	Identification															
4	a	2247910	Salmon	ac	*L.welshimeri*	TVP191	Seeding	/	2.8	ø	ø	ø	ø	/	/	A	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PD	AM ø halo	P	PD
4	a	2247911	Cod	ac	*L.welshimeri*	TVP191	Seeding	/	2.8	AL ø halo	AL	AL ø halo	AL	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
4	a	2247912	Hake	ac	*L.welshimeri*	TVP191	Seeding	/	2.8	AL ø halo	AL	AL ø halo	AL	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
4	a	2247913	Tuna	ac	*L.welshimeri*	TVP191	Seeding	/	2.8	ø	ø	ø	ø	/	/	A	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PD	AM ø halo	P	PD
4	a	2247914	Filet of julienne	ac	*L.welshimeri*	TVP191	Seeding	/	2.8	AL ø halo	AL	AL ø halo	AL	/	*L.welshimeri*	P	AL ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AL ø halo	P	PA
4	a	2281406	Salmon tartare	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
4	a	2281408	Herring	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
4	a	2281422	Herring	nc	/	/	/	/	/	AM halo+ AM ø halo	AM	AM halo+ AM ø halo	AM	/	*L.monocytogenes* + *L.innocua*	P	AL halo + AM ø halo	*L.mono* + *L.innocua*	*L.mono* + *L.innocua*	+/+	+	P	PA	*L.mono* + *L.innocua*	AL halo + AM ø halo	*L.mono* + *L.innocua*	P	PA	AL halo + AM ø halo	P	PA
4	a	2319214	Raw salmon	ac	*L. mono*	JBV888	Seeding	/	1.6	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
4	a	2319215	Saithe	ac	*L. mono*	JBV888	Seeding	/	1.6	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
4	a	2263652	Squid	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	a	2263653	Cod fillet	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	a	2247771	Plaice	/	/	/	/	/	/	EL	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	EL	A	NA
4	a	2247772	Salmon tartare	/	/	/	/	/	/	EM	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	EL	A	NA
4	a	2263652	Squid	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	a	2263653	Cod fillet	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	a	2281409	Salmon Kéta	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	a	2281410	Raw salmon	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	a	2281411	Herring	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	a	2281412	Herring	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	b	2247775	Smoked mackerel	nc	/	/	/	/	/	EM	EM	AM	AM	/	*L.innocua*	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅	∅	/	A	ND	∅	A	ND
4	b	2247813	Smoked salmon	ac	*L.welshimeri*	AJP106	Seeding	/	3.0	EL	EL	AL ø halo	ALø halo	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
4	b	2247814	Smoked trout	ac	*L.welshimeri*	AJP106	Seeding	/	3.0	∅	∅	ALø halo	ALø halo	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
4	b	2247815	Smoked herring	ac	*L.welshimeri*	AJP106	Seeding	/	3.0	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
4	b	2247915	Smoked salmon	ac	*L.innocua*	ABB472	Seeding	/	2.6	AL ø halo	AL	AL ø halo	AL	/	*L.innocua*	P	AL ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AL ø halo	*L.innocua*	P	PA	AL ø halo	P	PA
4	b	2247916	Smoked trut	ac	*L.innocua*	ABB472	Seeding	/	2.6	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
4	b	2316952	Smoked herring	nc	/	/	/	/	/	DL (1) halo	∅	BM halo	BM	/	*L.monocytogenes*	P	∅	/	/	/	/	A	ND	O&A:EL - Pal:EL	∅	/	A	ND	∅	A	ND
4	b	2317057	Smoked salmon	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
4	b	2317058	Smoked salmon	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
4	b	2319332	Smoked herring	nc	/	/	/	/	/	AM ∅ halo	BM	AM ∅ halo	AM	/	*L.innocua*	P	AL ∅ halo	*L.innocua*	*L.innocua*	+	/	P	PA	O&A:AMøhalo - Pal:AL *L.innocua*	AM ∅ halo	*L.innocua*	P	PA	AL ∅ halo	P	PA
4	b	2263654	Smoked haddock	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø Pal:ø	∅	/	/	/	∅	A	NA
4	b	2247773	Salmon tartare with oil	/	/	/	/	/	/	EM	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EL	A	NA
4	b	2247774	Salmon tataki	/	/	/	/	/	/	EM	∅	∅	∅	/	/	A	CL ∅ halo (doubt)	/	TSAYE: nc catalase -	-	/	A (PP)	NA(PP)	O&A:ø - Pal:ø	EL	/	/	/	CL ∅ halo (doubt)	A (PP)	NA(PP)
4	b	2247776	Smoked salmon	/	/	/	/	/	/	EL	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	b	2319333	Smoked trout	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	b	2319299	Marinated shrimps	/	/	/	/	/	/	EL	EM	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	b	2319300	Provencal mackerel	/	/	/	/	/	/	EM	EM	EL	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	/	/	EL	A	NA
4	b	2319301	Smoked salmon	/	/	/	/	/	/	EL	EM	∅	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	b	2319302	Marinated salmon	/	/	/	/	/	/	EL	EL	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	b	2263654	Smoked haddock	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	c	2247780	Shrimp shell	nc	/	/	/	/	/	EM	EM	AM	AM	/	*L.welshimeri*	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅	EL	/	A	ND	∅	A	ND
4	c	2247781	Surimi shell	nc	/	/	/	/	/	EM	∅	AM	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
4	c	2247816	Salmon preparation	ac	*L.innocua*	RXY158	Seeding	/	1.6	BM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
4	c	2247917	Salad with shrimps	ac	*L.innocua*	RXY158	Seeding	/	1.6	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
4	c	2247918	Salmon with sorrel	ac	*L.innocua*	ABB472	Seeding	/	2.6	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AH ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AH ø halo	*L.innocua*	P	PA	AH ø halo	P	PA
4	c	2247919	Prawn salad	ac	*L.innocua*	ABB472	Seeding	/	2.6	ø	EL	ø	EL	/	/	A	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PD	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PD	AM ø halo	P	PD
4	c	2247920	St Jacques shell	ac	*L.innocua*	ABB473	Seeding	/	2.6	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA

Cat	Type	#	Sample	Contamination						ISO 11290-1*							Listeria Precis L.spp - 24 LEB 20h at 37°C								Listeria Precis *L.spp* 24 LEB 72h 2-8°C				Brilliance 72h at 2-8°C	Result	Agreement
										O&A	Palcam	Fraser tube		Conf.		Result *L.spp*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement			
				Type	Strain		Stress	Stress level	Inoc. level			O&A	Palcam	CAMP Test If necessary	Identification																	
4	c	2281419	Shrimp fritter	nc	/	/	/	/	/	EM	EM	∅	EM	/	/	A	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*	BM halo	*L.mono*	P	PD	BM halo	P	PD
4	c	2281421	Cod accra	nc	/	/	/	/	/	∅	∅	∅	∅	/	/	A	AL halo + AM ø halo	*L.mono + L.innocua*	*L.mono + L.innocua*	+/+	+	P	PD	*L.mono + L.innocua*	AL halo + AM ø halo	*L.mono + L.innocua*	P	PD	AL halo + AM ø halo	P	PD
4	c	2317053	Shrimp fritter	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
4	c	2263655	Shrimp shell	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EL	A	NA
4	c	2263656	Salmon shell	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	c	2263658	St Jacques shell	/	/	/	/	/	/	∅	EL	EL	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	c	2247777	Salmon shell	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	c	2247778	Fish salad	/	/	/	/	/	/	EM	EM	∅	EM	/	/	A	EM	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EM	A	NA
4	c	2247779	King prawns and scallops	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	∅	A	NA
4	c	2319283	Ginger Coconut Mussels Prawns	/	/	/	/	/	/	∅	∅	∅	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EL	A	NA
4	c	2263655	Shrimp shell	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EL	A	NA
4	c	2263656	Salmon shell	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
4	c	2263658	St Jacques shell	/	/	/	/	/	/	∅	EL	EL	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA

Cat	Type	#	Sample	Contamination						ISO 11290-1*						Listeria Precis L.spp - 24 LEB 20h at 37°C								Listeria Precis *L.spp* 24 LEB 72h 2-8°C				Brilliance 72h at 2-8°C		
										O&A	Palcam	Fraser tube		Conf.		Result *L.spp*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement		Result	Agreement
				Type	Strain		Stress	Stress level	Inoc. level			O&A	Palcam	CAMP Test If necessary	Identification																
5	a	2247921	Apple	ac	*L.innocua*	GWC718	Seeding	/	2.4	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AH ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AH ø halo	*L.innocua*	P	PA	AH ø halo	P	PA
5	a	2247924	Radish	ac	*L.innocua*	GWC718	Seeding	/	2.4	AL ø halo	AL	AL ø halo	AL	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
5	a	2247925	Zucchini	ac	*L.innocua*	GWC718	Seeding	/	2.4	EM	EM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
5	a	2247783	Raspberry	nc	/	/	/	/	/	AM	AM	AM	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh*	P	PA	AM ø halo	P	PA
5	a	2247784	Onions	nc	/	/	/	/	/	AM	AM	AM	AM	/	*L.innocua*	P	AL ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AL ø halo	*L.innocua*	P	PA	AL ø halo	P	PA
5	a	2247923	Mushrooms	nc	/	/	/	/	/	AL ø halo	AL	AL ø halo	AL	/	*L.innocua*	P	AM ø halo + halo	*L.innocua+L.mono*	*L.innocua+L.mono*	+/+	+	P	PA	O&A: AM halo+AM ∅halo/ PAL: AM *L.innocua +L.monocytogenes*	AM ø halo + halo	*L.innocua +L.mono*	P	PA	AM ø halo + halo	P	PA
5	a	2281433	Zucchini	nc	/		/	/	/	AM halo	AL	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.mono*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
5	a	2281434	Beets	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.mono*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
5	a	2281439	Raddish	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AL halo	*L.mono*	P	PA	AM halo	P	PA
5	a	2318992	Mushrooms	nc	/	/	/	/	/	BM halo	EL	AM halo	AM	/	*L.monocytogenes*	P	BL halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	BM halo	*L.mono*	P	PA	BL halo	P	PA
5	a	2247782	Lettuce	/	/	/	/	/	/	EM	EM	∅	EL	/	/	A	EM	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	EM	/	/	/	EM	A	NA
5	a	2247922	Endive	/	/	/	/	/	/	ø	ø	ø	ø	/	/	A	ø	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	/	/	ø	A	NA
5	a	2319284	Raddish	/	/	/	/	/	/	∅	EL	EH	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	/	/	EL	A	NA
5	a	2319285	Melon	/	/	/	/	/	/	EH	EL	EM	EM	/	/	A	EH	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	EH	A	NA
5	a	2319303	Banana	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
5	a	2319304	Strawberry	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
5	a	2319305	Watermelon	/	/	/	/	/	/	EM	EM	EL	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
5	a	2316953	Tomatoes	/	/	/	/	/	/	∅	EL	∅	EL	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
5	a	2319308	Zucchini	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EL	A	NA
5	a	2319311	Apple	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	∅	A	NA
5	a	2333609	Cucumber	ac	*L. mono*	XBB696	Seeding	/	0.8	∅	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	/	/	EL	A	NA
5	b	2247817	Red peppers	ac	*L.innocua*	TWH478	Seeding	/	2.2	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
5	b	2247818	Zucchini sliced	ac	*L.innocua*	TWH478	Seeding	/	2.2	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
5	b	2247927	Sliced pinapple	ac	*L.welshimeri*	TXR109	Seeding	/	1.6	∅	∅	∅	∅	/	/	A	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh.*	P	PD	AM ø halo	P	PD
5	b	2247929	Sliced carots	nc	/	/	/	/	/	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh.*	P	PA	AM ø halo	P	PA
5	b	2247930	Mixed carots, pepper, cabbage	nc	/	/	/	/	/	∅	∅	∅	∅	/	/	A	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PD	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh.*	P	PD	AM ø halo	P	PD
5	b	2247835	Gratted carot	ac	*L.seeligeri*	ADTW22	Seeding	/	2.8	∅	∅	AL ø halo	∅	/	*L.seeligeri*	P	∅	/	/	/	/	A	ND	O&A: ∅ / PAL: ∅	EL	/	A	ND	∅	A	ND
5	b	2247820	Cucumbers with cream	ac	*L.welshimeri*	TLJ742	Seeding	/	3.0	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh.*	P	PA	AM ø halo	P	PA
5	b	2281453	Rice salad with peas and peppers	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
5	b	2333616	Beets	ac	*L. mono*	BVU991	Seeding	/	2.0	EL	EL	∅	∅	/	/	A	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*	BM halo	*L.mono*	P	PD	AM halo	P	PD
5	b	2333617	Mushrooms at the greek	ac	*L. mono*	BXQ019	Seeding	/	2.6	CM halo	CM	AL halo	BL	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	BM halo	*L.mono*	P	PA	AM halo	P	PA
5	b	2247926	Mixed carots	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	ø	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	∅	/	/	ø	A	NA
5	b	2247928	Mixed carots, leeks	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	ø	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	EL	/	/	ø	A	NA
5	b	2316961	Mixed salad	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:EL	∅	/	/	/	∅	A	NA
5	b	2316962	Celery remoulade	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:EL	EL	/	/	/	EL	A	NA
5	b	2319266	Seasoned carrot	/	/	/	/	/	/	EL	EM	∅	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	EL	A	NA
5	b	2247787	Quinoa and bulgur salad	/	/	/	/	/	/	EM	EM	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
5	b	2263642	Vegetable spelled salad	/	/	/	/	/	/	EM	EM	∅	EL	/	/	A	EM	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	/	/	EM	A	NA
5	b	2263644	Celery and carrot	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	/	/	EL	A	NA
5	b	2263645	Cucumbers with cream	/	/	/	/	/	/	EM	EM	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	/	/	∅	A	NA
5	b	2319306	Mixed salad	/	/	/	/	/	/	∅	∅	∅	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	EL	A	NA
5	c	2247819	Tian vegetables	ac	*L.welshimeri*	TLJ742	Seeding	/	3.0	AM ø halo	AM ø halo	AM ø halo	AM ø halo	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L.welsh.*	P	PA	AM ø halo	P	PA
5	c	2247841	Cauliflower gratin	ac	*L.seeligeri*	TJM186	Seeding	/	2.8	∅	∅	AL ø halo	∅	/	*L.seeligeri*	P	AM ø halo	*L.seeligeri*	*L.seeligeri*	+	+	P	PA	O&A: AM / PAL: AM *L.seeligeri*	AM ø halo	*L.seeligeri*	P	PA	AM ø halo	P	PA
5	c	2247842	Vegetables gratin	ac	*L.seeligeri*	TJM186	Seeding	/	2.8	∅	∅	AL ø halo	∅	/	*L.seeligeri*	P	AM ø halo	*L.seeligeri*	*L.seeligeri*	+	+	P	PA	O&A: AM / PAL: AM *L.seeligeri*	AM ø halo	*L.seeligeri*	P	PA	AM ø halo	P	PA
5	c	2247836	Ckickpea	ac	*L.seeligeri*	ADTW22	Seeding	/	2.8	∅	∅	AL ø halo	∅	/	*L.seeligeri*	P	AL ø halo	*L.seeligeri*	*L.seeligeri*	+	+	P	PA	O&A: AM / PAL: AM *L.seeligeri*	AM ø halo	*L.seeligeri*	P	PA	AL ø halo	P	PA
5	c	2247838	Couscous vegetables	ac	*L.seeligeri*	ADTW22	Seeding	/	2.8	∅	∅	AL ø halo	∅	/	*L.seeligeri*	P	AL ø halo	*L.seeligeri*	*L.seeligeri*	+	+	P	PA	O&A: AM / PAL: AM *L.seeligeri*	AL ø halo	*L.seeligeri*	P	PA	AL ø halo	P	PA
5	c	2247839	Cooked vegetables	ac	*L.seeligeri*	ADTW22	Seeding	/	2.8	∅	∅	AL ø halo(1)	∅	/	*L.seeligeri*	P	CL ø halo	*L.seeligeri*	*L.seeligeri*	+	+	P	PA	O&A: AM / PAL: AM *L.seeligeri*	BL ø halo	*L.seeligeri*	P	PA	CL ø halo	P	PA
5	c	2333619	Lasagna vegetables pesto	ac	*L. mono*	BXQ019	Seeding	/	2.6	EM	EL	∅	EL	/	/	A	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PD	*L.monocytogenes*	AM halo	*L.mono*	P	PD	AM halo	P	PD
5	c	2333620	Vegetables gratin	ac	*L. mono*	XBB696	Seeding	/	3.0	AM halo	AM	AH halo	AH	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
5	c	2333621	Ratatouille	ac	*L. mono*	FCY076	Seeding	/	1.8	AL halo (3)	∅	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
5	c	2333622	Vegetables pancake	ac	*L. mono*	FCY076	Seeding	/	1.8	BM halo	BM	BM halo	BM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
5	c	2316956	Goat cheese spinach pie	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA
5	c	2316957	Zucchini tomato goat cheese tart	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	/	/	∅	A	NA

Cat	Type	#	Sample	Contamination						ISO 11290-1[■]							Listeria Precis L.spp - 24 LEB 20h at 37°C								Listeria Precis *L.spp* 24 LEB 72h 2-8°C				Brilliance 72h at 2-8°C	Result	Agreement
				Type	Strain		Stress	Stress level	Inoc. level	O&A	Palcam	Fraser tube		Conf.		Result *L.spp*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement			
												O&A	Palcam	CAMP Test If necessary	Identification																
5	c	2316963	Vegetables panfried	/	/	/	/	/	/	∅	EM	∅	EL	/	/	**A**	EL	/	/	/	/	**A**	**NA**	O&A:ø - Pal:ø	EL	/	/	/	EL	**A**	**NA**
5	c	2247785	Cooked vegetables	/	/	/	/	/	/	∅	∅	∅	∅	/	/	**A**	EL	/	/	/	/	**A**	**NA**	O&A: ∅ / PAL: ∅	EL	/	/	/	EL	**A**	**NA**
5	c	2247786	Moussaka	/	/	/	/	/	/	∅	∅	∅	∅	/	/	**A**	∅	/	/	/	/	**A**	**NA**	O&A: ∅ / PAL: ∅	∅	/	/	/	∅	**A**	**NA**
5	c	2247788	Coral lentils	/	/	/	/	/	/	EM	∅	∅	∅	/	/	**A**	EL	/	/	/	/	**A**	**NA**	O&A: ∅ / PAL: ∅	EL	/	/	/	EL	**A**	**NA**
5	c	2247789	Green beans	/	/	/	/	/	/	EL	∅	∅	∅	/	/	**A**	EL	/	/	/	/	**A**	**NA**	O&A: ∅ / PAL: ∅	EL	/	/	/	EL	**A**	**NA**
5	c	2316941	Pesto sauce	/	/	/	/	/	/	EM	EM	∅	∅	/	/	**A**	EM	/	/	/	/	**A**	**NA**	O&A:ø - Pal:ø	EL	/	/	/	EM	**A**	**NA**
5	c	2316942	Tomato sauce	/	/	/	/	/	/	∅	EL	∅	∅	/	/	**A**	EL	/	/	/	/	**A**	**NA**	O&A:ø - Pal:ø	EL	/	/	/	EL	**A**	**NA**
5	c	2319267	Cooked beets	/	/	/	/	/	/	∅	EL	∅	∅	/	/	**A**	EL	/	/	/	/	**A**	**NA**	O&A:ø - Pal:ø	EL	/	/	/	EL	**A**	**NA**

Cat	Type	#	Sample	Contamination						ISO 11290-1*							Listeria Precis L.spp - 24 LEB 20h at 37°C								Listeria Precis *L.spp* 24 LEB 72h 2-8°C				Brilliance 72h at 2-8°C	Result	Agreement
										O&A	Palcam	Fraser tube		Conf.		Result *L.spp*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement			
				Type	Strain		Stress	Stress level	Inoc. level			O&A	Palcam	CAMP Test If necessary	Identification																	
6	a	2247862	Process water cheese factory	ac	*L.welshimeri*	RVG428	Seeding	/	3.0	AM ø halo	AM ø halo	AM ø halo	AM	/	*L.welshimeri*	P	AL ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L. welsh.*	P	PA	AL ø halo	P	PA
6	a	2247863	Cheese line rinse water	ac	*L.welshimeri*	RVG428	Seeding	/	3.0	AM ø halo	AM ø halo	AM ø halo	AM	/	*L.welshimeri*	P	AL ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	BM ø halo	*L. welsh.*	P	PA	AL ø halo	P	PA
6	a	2247864	Process water	ac	*L.welshimeri*	RVG428	Seeding	/	3.0	AL ø halo	AL ø halo	AM ø halo	AM	/	*L.welshimeri*	P	AL ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L. welsh.*	P	PA	AL ø halo	P	PA
6	a	2247866	Process water	ac	*L.welshimeri*	RVG428	Seeding	/	3.0	AM ø halo	AM ø halo	AM ø halo	AM	/	*L.welshimeri*	P	AL ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L. welsh.*	P	PA	AL ø halo	P	PA
6	a	2247832	Process water	ac	*L.welshimeri*	BVP365	Seeding	/	3.0	AL halo	AL	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	O&A: AM halo/ PAL: AM *L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
6	a	2247833	Process water	ac	*L mono*	BVP365	Seeding	/	3.0	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AL halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	O&A: AM halo/ PAL: AM *L.monocytogenes*	AL halo	*L.mono*	P	PA	AL halo	P	PA
6	a	2247834	Process water	ac	*L mono*	BVP365	Seeding	/	3.0	AM halo	AL	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	O&A: AM halo/ PAL: AM *L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
6	a	2333625	Blood line process water	nc	/	/	/	/	/	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
6	a	2333626	Feather line process water	nc	/	/	/	/	/	AL halo	AL	AH halo	AH	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	AM halo	*L.mono*	P	PA	AM halo	P	PA
6	a	2333627	Poultry line process water	nc	/	/	/	/	/	∅	∅	∅	∅	/	/	A	AL halo (2)	*L.monocytogenes (after réiso)*	*L.monocytogenes*	+ (after réiso)	+ (after réiso)	P	PD	*L.monocytogenes*	EL	/	A	NA	AL halo (2)	P	PD
6	a	2247861	Process water cheese factory	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	A	NA	∅	A	NA
6	a	2247865	Process water	ac	*L.welshimeri*	RVG428	Seeding	/	3	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A: ∅ / PAL: ∅	∅	/	A	NA	∅	A	NA
6	a	2319314	Process water poultry brine	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	a	2319315	Process water vegetables	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	a	2319316	Process water food packaging	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	a	2319317	Process water vegetables	/	/	/	/	/	/	∅	EL	∅	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	A	NA	EL	A	NA
6	a	2318890	Process water	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	a	2318891	Process water RTH industry	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	a	2318892	Process water butcher	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	a	2318893	Process water bakery	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	b	2247937	Dusts pastry industry	ac	*L.welshimeri*	TKZ429	king 30 min 6	0.7	1.2	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	BM ø halo	*L. welsh.*	P	PA	AM ø halo	P	PA
6	b	2247938	Dusts poultry industry	ac	*L.welshimeri*	TKZ429	king 30 min 6	0.7	1.2	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L. welsh.*	P	PA	AM ø halo	P	PA
6	b	2247939	Dusts poultry industry	ac	*L.welshimeri*	TKZ429	king 30 min 6	0.7	1.2	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	BM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	BL ø halo	*L. welsh.*	P	PA	BM ø halo	P	PA
6	b	2247940	Dusts powder milk industry	ac	*L.innocua*	GRR943	king 30 min 6	0.9	2.6	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
6	b	2247941	Dusts spicy packaging	ac	*L.innocua*	GRR943	king 30 min 6	0.9	2.6	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
6	b	2247942	Dusts egg powder industry	ac	*L.innocua*	GRR943	king 30 min 6	0.9	2.6	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
6	b	2319321	Dusts flour environment	nc	/	/	/	/	/	EH	EH	BH ∅ halo	DH	/	*L.welshimeri*	P	CL ∅ halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A:AMøhalo - Pal:AM	AM ∅ halo	*L. welsh.*	P	PA	CL ∅ halo	P	PA
6	b	2333868	Dusts dairy industry	nc	/	/	/	/	/	BM halo	BM	BM halo	BM	/	*L.monocytogenes*	P	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*	BM halo	*L.mono*	P	PA	BM halo	P	PA
6	b	2333783	Vegetables residues	nc	/	/	/	/	/	EL	EL	CL ∅ halo	EL	/	*L.welshimeri*	P	EL	/	/	/	/	A	ND	O&A:ø - Pal:ø	EM	/	A	ND	EL	A	ND
6	b	2333784	Fish industry residues	nc	/	/	/	/	/	∅	EL	EL	EL	/	/	A	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PD	*L.innocua*	AM ø halo	*L.innocua*	P	PD	AM ø halo	P	PD
6	b	2319318	Dusts milk powder industry	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	b	2319319	Dusts infant cereals industry	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	b	2319320	Dusts spices industry	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	b	2319322	Dusts flour environment	/	/	/	/	/	/	EM	EH	EH	EM	/	/	A	EM	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	A	NA	EM	A	NA
6	b	2319323	Poultry processing residues	/	/	/	/	/	/	EH	EH	EL	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
6	b	2319324	Fish residues	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
6	b	2319325	Poultry residues	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	b	2319326	Animal meal residues	/	/	/	/	/	/	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
6	b	2319331	Chicken industry residues	/	/	/	/	/	/	EL	EM	EL	EL	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	A	NA	EL	A	NA
6	b	2333632	Poultry residues	ac	*L. mono*	RCJ280	Spiking	0.9	0.6	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:EL - Pal:EL	EL	/	A	NA	EL	A	NA
6	c	2247943	Wipe cold room siphon	nc	/	/	/	/	/	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AL ø halo	*L. welsh.*	P	PA	AM ø halo	P	PA
6	c	2247944	Wipe chopping block	nc	/	/	/	/	/	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
6	c	2247945	Wipe ground	nc	/	/	/	/	/	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L. welsh.*	P	PA	AM ø halo	P	PA
6	c	2247946	Wipe ground	nc	/	/	/	/	/	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L. welsh.*	P	PA	AM ø halo	P	PA
6	c	2247947	Wipe désarêteuse	nc	/	/	/	/	/	AM ø halo	AM	AM ø halo	AM	/	*L.welshimeri*	P	AM ø halo	*L.welshimeri*	*L.welshimeri*	+	+	P	PA	O&A: AM / PAL: AM *L.welshimeri*	AM ø halo	*L. welsh.*	P	PA	AM ø halo	P	PA
6	c	2247948	Wipe plastic pallet	nc	/	/	/	/	/	AM ø halo	AM	AM ø halo	AM	/	*L.innocua*	P	AM ø halo	*L.innocua*	*L.innocua*	+	+	P	PA	O&A: AM / PAL: AM *L.innocua*	AM ø halo	*L.innocua*	P	PA	AM ø halo	P	PA
6	c	2333810	Swab egg product environment area 1	nc	/	/	/	/	/	AH halo	AH	AH halo	AH	/	*L.monocytogenes*	P	AH halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*	AH halo	*L.mono*	P	PA	AH halo	P	PA
6	c	2333811	Swab egg product environment area 2	nc	/	/	/	/	/	AL halo + AM ∅ halo	AM	AH ∅ halo	AH	/	*L.monocytogenes*	P	∅	/	/	/	/	A	ND	O&A:∅ - Pal:EL	EM	/	A	ND	∅	A	ND
6	c	2333813	Swab egg product environment area 4	nc	/	/	/	/	/	AH halo + AL ∅ halo	BM	AM halo + AL ∅ halo	BM	/	*L.mono + L.innocua*	P	AH halo + AL ∅ halo	*L.monocytogenes +L.innocua*	*L.monocytogenes +L.innocua*	+/+	++	P	PA	*L.monocytogenes +L.innocua*	AM halo + AM ∅ halo	*L.mono+L. innocua*	P	PA	AH halo + AL ∅ halo	P	PA
6	c	2333774	Wipe environment dairy	nc	/	/	/	/	/	EL	EL	∅	EL	/	/	A	AM halo + AL ∅ halo	*L.monocytogenes +L.welshimeri*	*L.monocytogenes +L.welshimeri*	+/+	+/+	P	PD	*L.monocytogenes +L.welshimeri*	AL halo + AM ∅ halo	*L.mono + L. welsh*	P	PD	AM halo + AL ∅ halo	P	PD
6	c	2333869	Wipe workplan	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	c	2333870	Wipe oven door	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	c	2333871	Wipe tyransport trolley	/	/	/	/	/	/	∅	EM	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	c	2333872	Wipe grinder	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA

Environmental samples

Cat	Type	#	Sample	Contamination						ISO 11290-1■							Listeria Precis L.spp - 24 LEB 20h at 37°C								Listeria Precis *L.spp* 24 LEB 72h 2-8°C				Brilliance 72h at 2-8°C	Result	Agreement
										O&A	Palcam	Fraser tube		Conf.		Result *L.spp*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID	Brilliance	Conf.	Result	Agreement			
				Type	Strain		Stress	Stress level	Inoc. level			O&A	Palcam	CAMP Test If necessary	Identification																	
6	c	2333873	Wipe cold room shelf	/	/	/	/	/	/	∅	EM	∅	∅	/	/	A	EM	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EM	A	NA
6	c	2333874	Wipe Europe container in cold room	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EL	A	NA
6	c	2333875	Wipe pallet truck RTH environment	/	/	/	/	/	/	EM	EM	∅	∅	/	/	A	EM	/	/	/	/	A	NA	O&A:ø - Pal:ø	EM	/	A	NA	EM	A	NA
6	c	2333876	Wipe meat products environment area 1	/	/	/	/	/	/	EM	EM	∅	∅	/	/	A	EM	/	/	/	/	A	NA	O&A:ø - Pal:ø	EL	/	A	NA	EM	A	NA
6	c	2333877	Wipe refregirated display	/	/	/	/	/	/	∅	EL	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA
6	c	2333878	Wipe environment pastry	/	/	/	/	/	/	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø	∅	/	A	NA	∅	A	NA

APPENDIX L - ISO 6887 specific preparations

Cat	Type	#	Sample	Contamination						ISO 11290-1▪							Listeria Precis L.spp - 24 LEB 20h at 37°C							
										O&A	Palcam	Fraser tube		Conf.		Result *L.mono*	Brilliance NF	Microbact	ISO	Spot on Palcam	PrecisCheck™ lateral flow *L.spp*	Result	Agreement	ISO 16140 tests Fraser+AL+Pal+ID
				Type	Strain	Ref strain	Stress	Stress level	Inoc. level			O&A	Palcam	CAMP Test If necessary	Identification									
3	a	2281355	Raw milk cheese "Brillat Savarin" 28 % FAT **with** Tween 80	ac	*L. mono*	FMJ725	Seeding	/	0.8	EM	EL	AM halo	AM	/	*L.monocytogenes*	P	BL halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
3	a	2281355 bis	Raw milk cheese "Brillat Savarin" 28 % FAT **without** Tween 80	ac	*L. mono*	FMJ725	Seeding	/	0.8	EM	EL	AM halo	AM	/	*L.monocytogenes*	P	EL	/	/	/	/	A	ND	O&A:ø - Pal:ø
3	a	2333844	Raw milk cheese "Brillat Savarin" 28 % FAT **with** Tween 80	ac	*L. mono*	FMJ725	Seeding	/	2.2	BM halo	EL	AM halo	BM	/	*L.monocytogenes*	P	DM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
3	a	2333845	Raw milk cheese "Brillat Savarin" 28 % FAT **without** Tween 80	ac	*L. mono*	FMJ725	Seeding	/	2.2	BM halo	EL	AM halo	BM	/	*L.monocytogenes*	P	DM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
3	c	2281454	Pasteurized milk cheese "Bleu basque" **without** Tween	ac	*L. mono*	RKG938	Seeding	/	2.2	BM halo	BM	BM halo	BM	/	*L.monocytogenes*	P	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*
3	c	2281454bis	Pasteurized milk cheese "Bleu basque" 32.2 % FAT **with** Tween 80	ac	*L. mono*	RKG938	Seeding	/	2.2	BM halo	BM	BM halo	BM	/	*L.monocytogenes*	P	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*
3	c	2281455	Pasteurized milk cheese "Roquefort" **without** Tween	ac	*L. mono*	RKG938	Seeding	/	2.2	BM halo	BM	BM halo	BM	/	*L.monocytogenes*	P	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*
3	c	2281455bis	Pasteurized milk cheese "Roquefort" 29 % FAT **with** Tween 80	ac	*L. mono*	RKG938	Seeding	/	2.2	BM halo	BM	BM halo	BM	/	*L.monocytogenes*	P	BM halo	*L.monocytogenes*	*L.monocytogenes*	+	++	P	PA	*L.monocytogenes*
2	c	2333846	Delicatessen "Mousse de foie" 28% FAT**without** Tween	ac	*L. mono*	ALN239	Seeding	/	1.8	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø
2	c	2333847	Delicatessen "Mousse de foie" 28% FAT **with** Tween	ac	*L. mono*	ALN239	Seeding	/	1.8	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø
2	c	2333848	Delicatessen "Rillettes" 39% FAT **without** Tween	ac	*L. mono*	ALN239	Seeding	/	1.8	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø
2	c	2333849	Delicatessen "Rillettes" 39% FAT **with** Tween	ac	*L. mono*	ALN239	Seeding	/	1.8	∅	∅	∅	∅	/	/	A	∅	/	/	/	/	A	NA	O&A:ø - Pal:ø
2	c	2333850	Delicatessen "Rosette" 38% FAT **without** Tween	ac	*L. mono*	WBH449	Seeding	/	2.0	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
2	c	2333851	Delicatessen "Rosette" 38% FAT **with** Tween	ac	*L. mono*	WBH449	Seeding	/	2.0	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
5	a	2333852	Orange juice **without** pH adjustment	ac	*L. mono*	DBZ862	Seeding	/	1.6	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
5	a	2333853	Orange juice **with** pH adjustment	ac	*L. mono*	DBZ862	Seeding	/	1.6	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
5	a	2317069	Orange juice **without** pH adjustment	ac	*L. mono*	VVY500	Seeding	/	2.4	AM halo	AM	AH halo	AH	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
5	a	2317070	Orange juice **with** pH adjustment	ac	*L. mono*	VVY500	Seeding	/	2.4	AM halo	AM	AH halo	AH	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
5	a	2317073	Orange juice **without** pH adjustment	ac	*L. mono*	DBZ862	Seeding	/	3.0	AM halo	AM	AH halo	AH	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
5	a	2317074	Orange juice **with** pH adjustment	ac	*L. mono*	DBZ862	Seeding	/	3.0	AM halo	AM	AH halo	AH	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
5	a	2333854	Cayenne pepper **without** K2SO3	ac	*L. mono*	AYZ054	Spiking	0.7	2.8	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	AM halo	*L.monocytogenes*	*L.monocytogenes*	+	+	P	PA	*L.monocytogenes*
5	a	2333855	Cayenne pepper **with** K2SO3	ac	*L. mono*	AYZ054	Spiking	0.7	2.8	AM halo	AM	AM halo	AM	/	*L.monocytogenes*	P	EL	/	/	/	/	A	ND	O&A:ø - Pal:ø
5	a	2333856	Garlic powder **without** K2SO4	ac	*L. mono*	RCJ280	Spiking	0.8	1.2	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø
5	a	2333857	Garlic powder **with** K2SO4	ac	*L. mono*	RCJ280	Spiking	0.8	1.2	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø
5	a	2333858	Onion powder **without** K2SO5	ac	*L. mono*	RCJ280	Spiking	0.8	1.2	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø
5	a	2333859	Onion powder **with** K2SO5	ac	*L. mono*	RCJ280	Spiking	0.8	1.2	EL	EL	∅	∅	/	/	A	EL	/	/	/	/	A	NA	O&A:ø - Pal:ø

APPENDIX M - RLOD - Composite foods

Matrix : Deli salad "Piémontaise"
Strain : *Listeria monocytogenes*
Aerobic mesophilic flora: 8800 CFU/g

N° sample	Level	Inoculation level (cfu/sample)	ISO 11290-1							Listeria Precis *Listeria spp*			
			Half Fraser		Fraser		Confirmation	Final Result	Number positive samples/Total	24 LEB - 20h - 37°C			
			O&A	Palcam	O&A	Palcam				Brilliance	Confirmation	Final result	Number positive samples/Total
2263579	0	0	EL	EL	EL	EL	/	A	0/5	∅	/	A	0/5
2263580			EL	EL	∅	∅	/	A		∅	/	A	
2263581			EL	EL	∅	EL	/	A		∅	/	A	
2263582			EL	EL	∅	EL	/	A		∅	/	A	
2263583			EL	EL	∅	EL	/	A		EL	/	A	
2263584	1	0.8	EM	EM	AM halo	AM	*L.monocytogenes*	P	8/20	AL halo	*L.monocytogenes*	P	8/20
2263585			EL	EL	∅	EL	/	A		EL	/	A	
2263586			AM halo	AM halo	AM halo	AM	*L.monocytogenes*	P		EL	/	A	
2263587			EL	EL	∅	EL	/	A		∅	/	A	
2263588			AM halo	AM halo	AM halo	AM	*L.monocytogenes*	P		AL halo	*L.monocytogenes*	P	
2263589			EM	EM	EM	EM	/	A		∅	/	A	
2263590			EM	EM	AM halo	AM	*L.monocytogenes*	P		∅	/	A	
2263591			AM halo	AM halo	AM halo	AM	*L.monocytogenes*	P		AM halo	*L.monocytogenes*	P	
2263592			BM halo	BM halo	AM halo	AM	*L.monocytogenes*	P		AM halo	*L.monocytogenes*	P	
2263593			EM	EL	∅	∅	/	A		∅	/	A	
2263594			∅	EL	∅	∅	/	A		AM halo	*L.monocytogenes*	P	
2263595			AM halo	AM halo	AM halo	AM	*L.monocytogenes*	P		BM halo	*L.monocytogenes*	P	
2263596			∅	EL	∅	EL	/	A		BM halo	*L.monocytogenes*	P	
2263597			AM halo	EM	AM halo	AM	*L.monocytogenes*	P		EL	/	A	
2263598			EL	EL	∅	∅	/	A		∅	/	A	
2263599			∅	∅	∅	∅	/	A		∅	/	A	
2263600			∅	∅	∅	∅	/	A		AM halo	*L.monocytogenes*	P	
2263601			∅	EL	∅	∅	/	A		∅	/	A	
2263602			∅	∅	∅	∅	/	A		∅	/	A	
2263603			EM	EL	∅	∅	/	A		EL	/	A	
2263604	2	2.3	AM halo	EM	AM halo	AM	*L.monocytogenes*	P	5/5	AM halo	*L.monocytogenes*	P	4/5
2263605			BM halo	BM halo	AM halo	AM	*L.monocytogenes*	P		AM halo	*L.monocytogenes*	P	
2263606			∅	EM	AM halo	AM	*L.monocytogenes*	P		EL	/	A	
2263607			AM halo	AM halo	AM halo	AM	*L.monocytogenes*	P		AM halo	*L.monocytogenes*	P	
2263608			BM halo	BM halo	AM halo	AM	*L.monocytogenes*	P		AM halo	*L.monocytogenes*	P	

APPENDIX M - RLOD - Meat products

Matrix : Rillettes
Strain : *Listeria ivanovii*
Aerobic mesophilic flora: 200 CFU/g

N° sample	Level	Inoculation level (cfu/sample)	ISO 11290-1							Listeria Precis *Listeria spp*			
			Half Fraser		Fraser					24 LEB - 20h - 37°C			
			O&A	Palcam	O&A	Palcam	Confirmation	**Final Result**	Number positive samples/Total	Brilliance	Confirmation	**Final result**	Number positive samples/Total
2231931	0	0	∅	∅	/	/	/	**A**	0/5	∅	/	**A**	0/5
2231932			∅	∅	/	/	/	**A**		∅	/	**A**	
2231933			∅	∅	/	/	/	**A**		∅	/	**A**	
2231934			∅	∅	/	/	/	**A**		∅	/	**A**	
2231935			∅	∅	/	/	/	**A**		∅	/	**A**	
2231936	1	0.4	∅	∅	∅	∅	/	**A**	8/20	AL	*L.ivanovii*	**P**	15/20
2231937			∅	∅	∅	∅	/	**A**		AL	*L.ivanovii*	**P**	
2231938			∅	∅	∅	∅	/	**A**		AL	*L.ivanovii*	**P**	
2231939			∅	∅	∅	∅	/	**A**		AL	*L.ivanovii*	**P**	
2231940			∅	∅	∅	∅	/	**A**		AL	*L.ivanovii*	**P**	
2231941			∅	∅	∅	∅	/	**A**		AL	*L.ivanovii*	**P**	
2231942			AL	AL	AM	AL	*L.ivanovii*	**P**		∅	/	**A**	
2231943			AL	AL	AL	AL	*L.ivanovii*	**P**		AL	*L.ivanovii*	**P**	
2231944			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2231945			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2231946			∅	∅	∅	∅	/	**A**		AM	*L.ivanovii*	**P**	
2231947			BL	∅	AL	AL	*L.ivanovii*	**P**		∅	/	**A**	
2231948			∅	∅	∅	∅	/	**A**		AM	*L.ivanovii*	**P**	
2231949			AL	AL	AL	AL	*L.ivanovii*	**P**		AL	*L.ivanovii*	**P**	
2231950			AL	AL	AL	AL	*L.ivanovii*	**P**		∅	/	**A**	
2231951			AL	AL	AL	AL	*L.ivanovii*	**P**		AM	*L.ivanovii*	**P**	
2231952			∅	∅	∅	∅	/	**A**		AM	*L.ivanovii*	**P**	
2231953			AL	AL	AL	AL	*L.ivanovii*	**P**		AM	*L.ivanovii*	**P**	
2231954			AL	AL	AL	AL	*L.ivanovii*	**P**		AM	*L.ivanovii*	**P**	
2231955			∅	∅	∅	∅	/	**A**		AM	*L.ivanovii*	**P**	
2231956	2	2.1	AL	AL	AL	AL	*L.ivanovii*	**P**	3/5	∅	/	**A**	4/5
2231957			AL	AL	AL	AL	*L.ivanovii*	**P**		AM	*L.ivanovii*	**P**	
2231958			AL	AL	AL	AL	*L.ivanovii*	**P**		AM	*L.ivanovii*	**P**	
2231959			∅	∅	∅	∅	/	**A**		AL	*L.ivanovii*	**P**	
2231960			∅	∅	∅	∅	/	**A**		AM	*L.ivanovii*	**P**	

APPENDIX M - RLOD - Dairy products

Matrix : Raw milk
Strain : *Listeria monocytogenes*
Aerobic mesophilic flora: 38000 UFC/g

N° sample	Level	Inoculation level (cfu/sample)	ISO 11290-1▪						Number positive samples/Total	Listeria Precis *Listeria spp* 24 LEB - 20h - 37°C			
			Half Fraser		Fraser		Confirmation	**Final Result**		Brilliance	Confirmation	**Final result**	Number positive samples/Total
			O&A	Palcam	O&A	Palcam							
2281216	0	0	EM	EM	∅	∅	/	**A**	0/5	∅	/	**A**	0/5
2281217			EM	EM	∅	∅	/	**A**		EL	/	**A**	
2281218			EM	EM	∅	∅	/	**A**		EL	/	**A**	
2281219			EM	EM	∅	∅	/	**A**		EL	/	**A**	
2281220			EM	EM	∅	∅	/	**A**		EL	/	**A**	
2281221	1	0.7	BM halo	BM	AM halo	BM	*L.monocytogenes*	**P**	12/20	EL	/	**A**	10/20
2281222			BM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		EL	/	**A**	
2281223			AM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		AM halo	*L.monocytogenes*	**P**	
2281224			∅	EM	∅	EM	/	**A**		∅	/	**A**	
2281225			EL	EM	∅	EM	/	**A**		AM halo	*L.monocytogenes*	**P**	
2281226			∅	EM	∅	EM	/	**A**		EM	/	**A**	
2281227			AM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		AL halo	*L.monocytogenes*	**P**	
2281228			AM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		AL halo	*L.monocytogenes*	**P**	
2281229			∅	EM	∅	EM	/	**A**		∅	/	**A**	
2281230			∅	EM	∅	EM	/	**A**		EL	/	**A**	
2281231			EM	EM	AM halo	BM	*L.monocytogenes*	**P**		AM halo	*L.monocytogenes*	**P**	
2281232			EM	EM	AM halo	BM	*L.monocytogenes*	**P**		AM halo	*L.monocytogenes*	**P**	
2281233			EM	EM	AM halo	BM	*L.monocytogenes*	**P**		AM halo	*L.monocytogenes*	**P**	
2281234			EM	EM	∅	∅	/	**A**		AM halo	*L.monocytogenes*	**P**	
2281235			BM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		AM halo	*L.monocytogenes*	**P**	
2281236			BM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		EL	/	**A**	
2281237			BM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		AM halo	*L.monocytogenes*	**P**	
2281238			BM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		EL	/	**A**	
2281239			EM	EM	∅	EM	/	**A**		∅	/	**A**	
2281240			EM	EM	∅	EM	/	**A**		EL	/	**A**	
2281241	2	2.4	AM halo	BM	AM halo	BM	*L.monocytogenes*	**P**	5/5	AM halo	*L.monocytogenes*	**P**	5/5
2281242			AM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		AM halo	*L.monocytogenes*	**P**	
2281243			AM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		AM halo	*L.monocytogenes*	**P**	
2281244			AM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		AM halo	*L.monocytogenes*	**P**	
2281245			AM halo	BM	AM halo	BM	*L.monocytogenes*	**P**		AM halo	*L.monocytogenes*	**P**	

APPENDIX M - RLOD - Seafood products

Matrix : Smoked salmon
Strain : *Listeria innocua*
Aerobic mesophilic flora: 3600 CFU/g

N° sample	Level	Inoculation level (cfu/sample)	ISO 11290-1							Listeria Precis *Listeria spp*			
			Half Fraser		Fraser					24 LEB - 20h - 37°C			
			O&A	Palcam	O&A	Palcam	Confirmation	**Final Result**	Number positive samples/Total	Brilliance	Confirmation	**Final result**	Number positive samples/Total
2236702	0	0	∅	∅	∅	∅	/	**A**	0/5	∅	/	**A**	0/5
2236703			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2236704			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2236705			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2236706			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2236707	1	0.7	∅	∅	∅	∅	/	**A**	11/20	AM	*L.innocua*	**P**	15/20
2236708			∅	∅	∅	∅	/	**A**		AL	*L.innocua*	**P**	
2236709			AL	AL	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236710			AL	AL	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236711			∅	∅	∅	∅	/	**A**		AM	*L.innocua*	**P**	
2236712			∅	∅	∅	∅	/	**A**		AM	*L.innocua*	**P**	
2236713			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2236714			AL	∅	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236715			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2236716			∅	∅	∅	∅	/	**A**		AM	*L.innocua*	**P**	
2236717			AL	AM	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236718			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2236719			AM	AM	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236720			AL	AL	AM	AM	*L.innocua*	**P**		EL	/	**A**	
2236721			AL	AL	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236722			AM	AL	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236723			AL	AL	AM	AM	*L.innocua*	**P**		∅	/	**A**	
2236724			AL	AL	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236725			∅	∅	∅	∅	/	**A**		AM	*L.innocua*	**P**	
2236726			AL	AL	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236727	2	2.0	AL	AL	AM	AM	*L.innocua*	**P**	5/5	AM	*L.innocua*	**P**	4/5
2236728			AL	AL	AM	AM	*L.innocua*	**P**		AL	*L.innocua*	**P**	
2236729			AL	AL	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236730			AL	AL	AM	AM	*L.innocua*	**P**		AM	*L.innocua*	**P**	
2236731			AL	AL	AM	AM	*L.innocua*	**P**		∅	/	**A**	

APPENDIX M - RLOD - Vegetables

Matrix : Ready-to-cook vegetables
Strain : *Listeria monocytogenes*
Aerobic mesophilic flora: 3300 UFC/g

N° sample	Level	Inoculation level (cfu/sample)	ISO 11290-1*						Number positive samples/Total	Listeria Precis *Listeria spp*			
			Half Fraser		Fraser		Confirmation	Final Result		24 LEB - 20h - 37°C			
			O&A	Palcam	O&A	Palcam				Brilliance	Confirmation	Final result	Number positive samples/Total
2281246	0	0	∅	∅	∅	EL	/	A	0/5	∅	/	A	0/5
2281247			∅	∅	∅	∅	/	A		∅	/	A	
2281248			∅	∅	∅	∅	/	A		∅	/	A	
2281249			∅	∅	∅	EL	/	A		∅	/	A	
2281250			∅	∅	∅	EL	/	A		∅	/	A	
2281251	1	0.8	AL halo	AL	AM halo	AM	*L.monocytogenes*	P	13/20	EL	/	A	12/20
2281252			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		∅	/	A	
2281253			∅	EL	∅	EL	/	A		∅	/	A	
2281254			AL halo	AL	AM halo	AM	*L.monocytogenes*	P		∅	/	A	
2281255			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		∅	/	A	
2281256			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		AL halo	*L.monocytogenes*	P	
2281257			∅	EL	∅	EL	/	A		EL	/	A	
2281258			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		AL halo	*L.monocytogenes*	P	
2281259			∅	EL	∅	EM	/	A		AM halo	*L.monocytogenes*	P	
2281260			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		AM halo	*L.monocytogenes*	P	
2281261			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		EL	/	A	
2281262			AM halo	AM	∅	∅	/	A		AM halo	*L.monocytogenes*	P	
2281263			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		AM halo	*L.monocytogenes*	P	
2281264			∅	EL	∅	EL	/	A		AM halo	*L.monocytogenes*	P	
2281265			∅	EL	∅	EL	/	A		AL halo	*L.monocytogenes*	P	
2281266			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		∅	/	A	
2281267			∅	EL	∅	EL	/	A		AL halo	*L.monocytogenes*	P	
2281268			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		AL halo	*L.monocytogenes*	P	
2281269			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		AL halo	*L.monocytogenes*	P	
2281270			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		AM halo	*L.monocytogenes*	P	
2281271	2	2.1	AM halo	AM	AM halo	AM	*L.monocytogenes*	P	4/5	AM halo	*L.monocytogenes*	P	4/5
2281272			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		EL	/	A	
2281273			AM halo	AM	AM halo	AM	*L.monocytogenes*	P		AM halo	*L.monocytogenes*	P	
2281274			∅	EL	∅	EL	/	A		AM halo	*L.monocytogenes*	P	
2281275			AL halo	AL	AM halo	AM	*L.monocytogenes*	P		AM halo	*L.monocytogenes*	P	

APPENDIX M - RLOD - Environmental samples

Matrix : process water
Strain : *Listeria welshimeri RVG428*
Aerobic mesophilic flora: 3.2 10^7 CFU/g CFU/g

N° sample	Level	Inoculation level (cfu/sample)	ISO 11290-1							Listeria Precis *Listeria spp*			
			Half Fraser		Fraser					24 LEB - 20h - 37°C			
			O&A	Palcam	O&A	Palcam	Confirmation	**Final Result**	Number positive samples/Total	Brilliance	Confirmation	**Final result**	Number positive samples/Total
2247867	0	0	∅	∅	∅	∅	/	**A**	0/5	∅	/	**A**	0/5
2247868			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2247869			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2247870			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2247871			∅	∅	∅	∅	/	**A**		∅	/	**A**	
2247872	1	0.8	AM	AM	AM	AM	*L.welshimeri*	**P**	13/20	∅	/	**A**	13/20
2247873			AL	AL	AM	AM	*L.welshimeri*	**P**		∅	/	**A**	
2247874			AM	AM	AM	AM	*L.welshimeri*	**P**		AL	*L.welshimeri*	**P**	
2247875			AL	AL	AM	AM	*L.welshimeri*	**P**		AL	*L.welshimeri*	**P**	
2247876			AL	AL	AM	AM	*L.welshimeri*	**P**		AL	*L.welshimeri*	**P**	
2247877			∅	∅	∅	∅	/	**A**		AL	*L.welshimeri*	**P**	
2247878			AL	AL	AM	AM	*L.welshimeri*	**P**		AL	*L.welshimeri*	**P**	
2247879			∅	∅	∅	∅	/	**A**		AL	*L.welshimeri*	**P**	
2247880			∅	∅	∅	∅	/	**A**		AL	*L.welshimeri*	**P**	
2247881			∅	∅	∅	∅	/	**A**		AL	*L.welshimeri*	**P**	
2247882			AL	AL	AM	AM	*L.welshimeri*	**P**		∅	/	**A**	
2247883			∅	∅	∅	∅	/	**A**		AL	*L.welshimeri*	**P**	
2247884			AL	AL	AM	AM	*L.welshimeri*	**P**		∅	/	**A**	
2247885			∅	∅	∅	∅	/	**A**		AL	*L.welshimeri*	**P**	
2247886			AL	AL	AM	AM	*L.welshimeri*	**P**		∅	/	**A**	
2247887			AL	AL	AM	AM	*L.welshimeri*	**P**		AL	*L.welshimeri*	**P**	
2247888			∅	∅	∅	∅	/	**A**		AL	*L.welshimeri*	**P**	
2247889			AL	AL	AM	AM	*L.welshimeri*	**P**		∅	/	**A**	
2247890			AL	AL	AM	AM	*L.welshimeri*	**P**		∅	/	**A**	
2247891			AL	AL	AM	AM	*L.welshimeri*	**P**		AL	*L.welshimeri*	**P**	
2247892	2	2.0	∅	∅	∅	∅	/	**A**	1/5	∅	/	**A**	3/5
2247893			∅	∅	∅	∅	/	**A**		AM	*L.welshimeri*	**P**	
2247894			AL	AL	AM	AM	*L.welshimeri*	**P**		∅	/	**A**	
2247895			∅	∅	∅	∅	/	**A**		AM	*L.welshimeri*	**P**	
2247896			∅	∅	∅	∅	/	**A**		AM	*L.welshimeri*	**P**	