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VALIDATION & EXPERTISE

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

Summary report
according to the standard EN ISO 16140-2/A1 (2024)

Qualitative method

VIDAS *Listeria monocytogenes* Xpress
VIDAS LMX - Ref. 30123 - certificate # BIO 12/27-02/10
for the detection of *Listeria monocytogenes* in human food products and in environmental samples

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This report contains 92 pages, including 60 pages of appendices.

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Preamble

- **Protocols of validation:**

- **EN ISO 16140-1 and EN ISO 16140-2/A1 (2024): Microbiology of the food chain — Method validation**
  Part 1: Vocabulary.
  Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method.

- **AFNOR requirements regarding comparison and interlaboratory studies for implementation of the standard EN ISO 16140-2 (Version 12).**

- **Reference method:**

- **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:
  - meat products,
  - dairy products,
  - seafood products,
  - vegetal products,
  - composite foods,
- **Environmental samples.**

- **Certification body:**

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

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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).

1. Introduction

The method VIDAS *LMX* for the detection of *Listeria monocytogenes* is validated under the attestation number BIO 12/27-02/10. The validation history of the method is the following:

Study	Date	Standards	Expert Laboratory	Observation
Initial validation	Dec. 2009	ISO 16140/A1:2011 ISO 11290-1/A1	IPL Santé, Environnement durables Nord	Validation for all foods (except raw milk cheeses) and environmental samples
Extension	Feb. 2010	ISO 16140/A1:2011 ISO 11290-1/A1	Institut Scientifique d'Hygiène et d'Analyse	Extension for raw milk cheeses
First renewal	Nov. 2013	ISO 16140/A1:2011 ISO 11290-1/A1	Institut Scientifique d'Hygiène et d'Analyse	No additional tests
Extension	Sept. 2016	NA	NA	Extension for the use of software 4.8
Second renewal	Jan. 2017	ISO 16140-2 ISO 11290-1 (2017) AFNOR requirements rev. 6	Institut Scientifique d'Hygiène et d'Analyse	Additional tests to fulfill the requirements of the revised standards
Extension	2018	NA	NA	Extension for the use of software 4.10
Extension	Jul. 2019	NA	Assays performed by bioMerieux	Modification of the conjugate
Third renewal	December 2021	ISO 16140-2:2016 ISO 11290-1 (2017) AFNOR requirements rev. 7	Laboratory MICROSEPT	No additional tests
Fourth renewal	December 2025	ISO 16140-2/A1 (2024) ISO 11290-1 (2017)	Laboratory MICROSEPT	No additional tests

This document is a summary report concerning the VIDAS *LMX* method for the detection of *Listeria monocytogenes* without any supplementary tests. A reinterpretation of the data is nevertheless carried out in order to meet the requirements of amendment A1 of 2024 of the EN ISO 16140-2 standard.

2. Protocols of the methods

2.1. Alternative method

2.1.1. Principle of the alternative method

The VIDAS *L. monocytogenes* Xpress (LMX) assay is an enzyme immunoassay intended for use on the automated VIDAS instrument (see Operator's Manual) to detect *Listeria monocytogenes* antigens using the ELFA method (Enzyme Linked Fluorescent Assay).

Each test is composed of two parts:

- the Solid Phase Receptacle (SPR), which serves as the solid phase as well as the pipetting device. The interior of the SPR is coated with anti-*L. monocytogenes* antibodies adsorbed on its surface.
- The strip, which contains all the ready-to-use reagents needed for the assay: washing buffer, anti-*Listeria monocytogenes* antibodies conjugated with biotin and substrate.

All the assay steps are performed automatically by the instrument. The reaction medium is cycled in and out of the SPR several times.

- Part of the enrichment broth is dispensed into the reagent strip. The antigens present bind to the anti-*L. monocytogenes* antibodies coated on the inside wall of the SPR.
- Unbound sample components are washed away.
- Antibodies conjugated with alkaline phosphatase are then cycled in and out of the SPR® and will bind to any Listeria *monocytogenes* antigens which are themselves bound to the antibodies on the SPR® wall.
- Further wash steps remove unbound conjugate.
- During the final detection step, the substrate (4-Methylumbelliferyl phosphate) is cycled in and out of the SPR. The conjugated enzyme catalyzes the hydrolysis of this substrate into a fluorescent product (4-Methylumbelliferyl phosphate) the fluorescence of which is measured at 450 nm.

When the assay is completed, the results are analyzed automatically by the instrument, and a test value is generated for each sample. This value is then compared to an internal reference and each result is interpreted (positive or negative).:

Test value (TV) = sample RFV/standard RFV.
If TV < 0.05, Negative test
and
If TV ≥ 0.05, Positive test

2.1.2. Protocol of the alternative method

The general protocol for all human food products (meat products, dairy products [except raw milk cheeses], vegetables, seafood products, composite foods and environment samples consists in:

- enrichment of a 25 g sample in 225 ml LMX broth (1:10 dilution), supplemented with 500 µl of a selective mix, and incubated for 26-30 h at 37°C ± 1°C,
- followed by a VIDAS LMX test, tested from a 250 µl portion, after heating for 5 minutes at 95-100°C.

The specific protocol for raw milk cheeses consists in:

- enrichment of a 25 g sample portion in 225 ml LMX broth, supplemented with 500 µl of a selective mix,
- mix with a peristaltic blender,
- add 225 ml of LMX broth not supplemented,
- incubation for 20 -24 h at 37°C ± 1°C,
- followed by inoculation of 3 ml of LMX broth in 6 ml of LX broth, and incubated for 6-8 h at 37°C ± 1°C,
- followed by a VIDAS LMX test, tested from a 250 µl portion, after heating for 5 minutes at 95-100°C.

Notes:

- Each flask containing 225 ml of supplemented LMX broth must be pre-heated to 37°C ± 1°C (the flasks may be placed in an incubator the day before the tests).
- The freeze-dried selective factors must be reconstituted with 6 ml of distilled water and may be kept for up to 7 days at 2-8°C.
- It is important to shake the freeze-dried selective factors in the flask well before sampling.
- Protocol reference: 14226 C

Positive VIDAS LMX test results must be confirmed following one of the procedures below:

-Isolate the non-heated enrichment broth on an Ottaviani Agosti-type chromogenic agar, or a chromogenic agar that is part of a method certified NF VALIDATION.

Follow one of the 3 validated procedures below:

- The presence of typical *Listeria monocytogenes* colonies after isolation of the enrichment broth is sufficient to confirm the positive result.
- Identify between one and five typical colonies, using the tests described in the methods standardized by the CEN or ISO standard (including the purification step).
-On a Ottaviani and Agosti-type chromogenic agar, the confirmation of typical *Listeria monocytogenes* colonies using an API® strip can be performed without prior purification if the colony is sufficiently isolated.

Note: In the absence of characteristic colonies on a chromogenic plate with a positive VIDAS LMX test, another way of confirmation can be followed:

- General protocol : transfer 0.1 ml of unheated LMX broth to 6 ml of LX broth and incubate for 22-26h at 37°C, and then isolate on a chromogenic plate.
- Specific protocol :in addition to the previous transfer protocol, it is also possible to extend incubation time of the LMX broth to 24 hours before streaking on an chromogenic plate.

Assays were also conducted on samples tested during the accuracy test to evaluate the possibility to store the LMX broth for 72 hours at 2-8°C after incubation to verify that these storage conditions do not modify the result.

The diagram summarizing the method is shown in appendix 1.

2.1.3. Restriction

There is no restriction.

2.2. Reference method

Assays of the previous validations were performed according to the standard EN ISO 11290-1 / A1 (2005) "Horizontal method for the detection and enumeration of *Listeria monocytogenes* - Part 1: detection method." Following the revision of this standard, the modifications have no impact on the results obtained previously as well as on the performance of the alternative method.

Assays of the 2017 study were performed according to the standard EN ISO 11290-1 (2017) "Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp- Part 1: detection method."

The analytical scheme is presented in appendix 1.

2.3. Study design

It is a unpaired study as the reference and the alternative methods used two different enrichment broths for the first step in the enrichment procedure, Fraser ½ broth and LMX broth, respectively.

2.4. Application scope

The scope of the method concerns a broad range of foods and environmental samples. In this document, categories are classified as below:

- ❶ Meat products,
- ❷ Dairy products,
- ❸ Seafood products,
- ❹ Vegetal products
- ❺ Composite foods,
- ❻ Environmental samples.

3. Method comparison study

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. Sensitivity study

3.1.1. Protocols used for the study

The samples were analyzed by the reference and by the alternative method. For the alternative method, the minimum incubation time of the broth was applied.

All positive and discordant samples were confirmed using the following protocol:

a) Using the tests described in the ISO 11290-1 method, after isolation of LMX broth on *Listeria monocytogenes* selective agar (Ottaviani and Agosti Listeria agar),

b) Isolation of LMX broth on *Listeria monocytogenes* chromogenic agar (chromID Ottaviani Agosti etc.). The typical appearance of Listeria monocytogenes on chromogenic plates is sufficient to validate a positive VIDAS LMX test.

c) using an API *Listeria* gallery performed from a colony picked directly from the selective agar

Typical colonies on the O&A media were confirmed after purification by the tests described in the reference methods (biochemical confirmation and serology).

A storage of the enrichment broths for up to 72 hours at 5±3°C before performing the VIDAS LMX test and the confirmation steps was also tested.

3.1.2. Number and nature of the samples

Three hundred and sixty one (361) samples from the initial validation study and the extension of 2010 were kept for the statistical analysis.
One hundred and thirty four (134) samples of the renewal study in 2017 were added for the statistical analysis.

A total of 495 samples were thus analyzed.
The distribution of the samples is presented in table 1.

Table 1 : number and nature of the samples analyzed (PV: previous validation studies, I 17: ISHA 2017)

Category	Type		Year	Positive results	Negative results	Total
❶ Meat products	m1	Raw products	PV	9	11	20
			I 17	0	0	
	m2	Ready-to-eat and processed meat products	PV	3	7	20
			I 17	7	3	
	m3	Cured products	PV	13	7	23
			I 17	0	3	
	Total			**32**	**31**	**63**
❷ Dairy products	d1	Raw and pasteurised milk and cheese with pasteurised milk	PV	12	6	22
			I 17	0	4	
	d2	Goat and ewes pasteurised milk cheese	PV	9	13	23
			I 17	1	0	
	d3	Raw milk cheese	PV	26	28	60
			I 17	4	2	
	Total			**52**	**53**	**105**
❸ Seafood products	s1	Fresh fish fillets and shellfishs	PV	13	3	23
			I 17	0	7	
	s2	Smoked fish	PV	8	20	30
			I 17	2	0	
	s3	Processed products	PV	5	7	20
			I 17	5	3	
	Total			**33**	**40**	**73**
❹ Vegetal products	v1	Raw vegetal products	PV	6	12	22
			I 17	4	0	
	v2	Ready-to-eat, ready-to-cook raw vegetal products,…	PV	11	13	24
			I 17	0	0	
	v3	Processed vegetal products	PV	7	11	21
			I 17	3	0	
	Total			**31**	**36**	**67**
❺ Composite foods	c1	Ready-to-eat foods	PV	2	6	38
			I 17	18	12	
	c2	Ready-to-reheat foods	PV	12	9	43
			I 17	15	7	
	c3	Pastries, egg products,…	PV	7	11	45
			I 17	14	13	
	Total			**68**	**58**	**126**
❻ Environ-mental samples	e1	Process water	PV	6	10	20
			I 17	4	0	
	e2	Surface samples	PV	8	9	20
			I 17	2	1	
	e3	Residu	PV	10	11	21
			I 17	0	0	
	Total			**30**	**31**	**61**
Total (all categories)				**246**	**249**	**495**

3.1.3. Artificial contaminations of the samples

246 positives samples were analysed including 110 naturally contaminated samples.
For spikings, several strains were stressed using different treatments and the stress intensity was evaluated (logarithmic difference between enumeration on non selective agar and selective agar, cf. appendix 2).
For seedings, bacterial suspensions were calibrated and inoculated in the matrices. The samples so contaminated were stored at 2 – 8° for 48 to 72 hours (cf. appendix 2).
The proportion of naturally and artificially contaminated samples giving positive results is presented in table 2.

Table 2 : proportion of naturally and artificially contaminated samples giving positive results with the protocol of confirmation giving the more positive results

Category	Number and percentage of samples analyzed per contamination levels(CFU/25g)				
	Naturally contaminated	≤ 5 (spiking) ≤ 3 (seeding)	5-10 (spiking) 3-10 (seeding)	>10	Total
❶ Meat products	25	7	0	0	32
❷ Dairy products	9	12	28	3 (1 type 1, 1 type 2, 1 type 3)	52
❸ Seafood products	26	7	0	0	33
❹ Vegetal products	11	8	9	3 (1 type 1, 1 type 2, 1 type 3)	31
❺ Composite foods	22	44	2	0	68
❻ Environ. sample	17	9	1	3 (1 type 1, 1 type 2, 1 type 3)	30
Total	**110**	**87**	**40**	**9**	**246**
%	**44.7%**	**35.4%**	**16.3%**	**3.6%**	**100,0%**

3.1.4. Results

Raw results are presented in appendix 3 by step of validation.

The following tables present the summary of the results by incubation times and protocols of confirmation.

Table 3 : results of the sensitivity study (PA: positive agreement, TNA:total negative agreement, TND: total negative deviation, PD: positive deviation)

Category	Type	PA	TNA	TND	PD	N
❶ Meat products	m1	6	11	0	3	20
	m2	9	10	1	0	20
	m3	11	10	2	0	23
	Total	**26**	**31**	**3**	**3**	**63**
❷ Dairy products	d1	10	10	2	0	22
	d2	10	13	0	0	23
	d3	23	30	3	4	60
	Total	**43**	**53**	**5**	**4**	**105**
❸ Seafood products	s1	12	10	1	0	23
	s2	9	20	1	0	30
	s3	10	10	0	0	20
	Total	**31**	**40**	**2**	**0**	**73**
❹ Vegetal products	v1	8	12	0	2	22
	v2	7	13	0	4	24
	v3	8	11	1	1	21
	Total	**23**	**36**	**1**	**7**	**67**
❺ Composite foods	c1	17	18	0	3	38
	c2	20	16	4	3	43
	c3	20	24	0	1	45
	Total	**57**	**58**	**4**	**7**	**126**
❻ Environmental samples	e1	9	10	1	0	20
	e2	8	10	0	2	20
	e3	8	11	2	0	21
	Total	**25**	**31**	**3**	**2**	**61**
Protocol Raw milk cheese (dairy type d3)	**Total**	**23**	**30**	**3**	**4**	**60**
All categories	**Total**	**205**	**249**	**18**	**23**	**495**

3.1.5. Statistical interpretation

These results were used to calculate the sensitivity for the alternative method and the reference method and the relative sensitivity (cf. tables 4).

Table 4 : values in % of sensitivity for the two methods, relative trueness and false positive ratio for the alternative method (PA: positive agreement, NA: negative agreement, ND: negative deviation, PD: positive deviation, PP: presumptive positive before confirmation, 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, FNR: false negative ratio for the alternative method)

Category		Type	PA	$PA_{FP(alt)}$	NA	$NA_{FN(alt)}$	PD	ND	$ND_{FN(alt)}$	$PD_{FP(alt)}$	TND	TNA	SE_{alt} %	SE_{ref} %	RT %	FPR %	FNR
Meat products	a	Raw products	6	0	11	0	3	0	0	0	0	11	100,0	66,7	85,0	0,0	0,00
	b	Ready-to-eat and processed meat products	9	0	10	0	0	1	0	0	1	10	90,0	100,0	95,0	0,0	0,00
	c	Cured products	11	0	10	0	0	2	2	0	4	10	73,3	100,0	84,0	0,0	0,13
		Total	**26**	**0**	**31**	**0**	**3**	**3**	**2**	**0**	**5**	**31**	**85,3**	**91,2**	**87,7**	**0,0**	**0,06**
Dairy products	a	Raw and pasteurised milk and cheese with pasteurised milk	10	0	10	0	0	2	1	0	3	10	76,9	100,0	87,0	0,0	0,08
	b	Goat and ewes pasteurised milk cheese	10	0	13	0	0	0	0	0	0	13	100,0	100,0	100,0	0,0	0,00
	c	Raw milk cheese	23	0	30	0	4	3	2	0	5	30	84,4	87,5	85,5	0,0	0,06
		Total	**43**	**0**	**53**	**0**	**4**	**5**	**3**	**0**	**8**	**53**	**85,5**	**92,7**	**88,9**	**0,0**	**0,05**
Seafood products	a	Fresh fish fillets and shellfishs	12	0	10	0	0	1	0	0	1	10	92,3	100,0	95,7	0,0	0,00
	b	Smoked fish	9	0	20	0	0	1	0	0	1	20	90,0	100,0	96,7	0,0	0,00
	c	Processed products	10	0	10	0	0	0	0	0	0	10	100,0	100,0	100,0	0,0	0,00
		Total	**31**	**0**	**40**	**0**	**0**	**2**	**0**	**0**	**2**	**40**	**93,9**	**100,0**	**97,3**	**0,0**	**0,00**
Vegetal products	a	Raw vegetal products	8	0	12	0	2	0	0	0	0	12	100,0	80,0	90,9	0,0	0,00
	b	Ready-to-eat, ready-to-cook raw vegetal products,...	7	0	13	0	4	0	0	0	0	13	100,0	63,6	83,3	0,0	0,00
	c	Processed vegetal products	8	0	11	0	1	1	0	0	1	11	90,0	90,0	90,5	0,0	0,00
		Total	**23**	**0**	**36**	**0**	**7**	**1**	**0**	**0**	**1**	**36**	**96,8**	**77,4**	**88,1**	**0,0**	**0,00**
Composite food	a	Ready-to-eat foods	17	0	18	0	3	0	0	0	0	18	100,0	85,0	92,1	0,0	0,00
	b	Ready-to-reheat foods	20	0	16	0	3	4	0	0	4	16	85,2	88,9	83,7	0,0	0,00
	c	Pastries, egg products,...	20	0	24	0	1	0	1	0	1	24	95,5	95,5	95,7	0,0	0,05
		Total	**57**	**0**	**58**	**0**	**7**	**4**	**1**	**0**	**5**	**58**	**92,8**	**89,9**	**90,6**	**0,0**	**0,01**
Environmental samples	a	Process water	9	0	10	0	0	1	0	0	1	10	90,0	100,0	95,0	0,0	0,00
	b	Surface samples	8	0	10	0	2	0	0	0	0	10	100,0	80,0	90,0	0,0	0,00
	c	Residu	8	0	11	0	0	2	0	0	2	11	80,0	100,0	90,5	0,0	0,00
		Total	**25**	**0**	**31**	**0**	**2**	**3**	**0**	**0**	**3**	**31**	**90,0**	**93,3**	**91,8**	**0,0**	**0,00**
Protocol raw milk cheese (type c)			**23**	**0**	**30**	**0**	**4**	**5**	**3**	**0**	**8**	**54**	77,1	88,6	81,5	0,0	0,09
All categories			**205**	**0**	**249**	**0**	**23**	**18**	**6**	**0**	**24**	**249**	**90,5**	**90,9**	**90,6**	**0,0**	**0,02**

Table 5 presents the summary of the results for all categories and all protocols:

Table 5 : summary of the sensitivity study results for all the categories of the application scope

Parameter	ISO 16140-2 formulas	Results for all the categories	Results for the Protocol "Raw milk cheese"
Sensitivity of the alternative method	$SE_{alt} = \frac{(PA + PD)}{(PA + TND + PD)} x\ 100\ \%$	90.5%	77.1%
Sensitivity of the reference method	$SE_{ref} = \frac{(PA + TND)}{(PA + TND + PD)} x\ 100\ \%$	90.9%	88.6%
Relative trueness	$RT = \frac{(PA + TNA)}{N} x100\ \%$	90.6%	81.8%
False positive ratio	$FPR = \frac{PA_{FP(alt)} + PD_{FP\ (alt)}}{TNA} x\ 100\ \%$	0%	0%
False negative ratio	$FNR = \frac{NA_{FN(alt)} + ND_{FN(alt)}}{PA + TND + PD}$	0.02	0.09

3.1.6. Analysis of discordant results

Discordant results are examined according to the standard ISO 16140-2/A1 (2024).

Table 6 presents the summary of the discordant results for all categories.

Table 6 : summary of discordant results for all the categories (PV: Previous Validation,I 17: ISHA 2017 TC: type of contamination (sp: spinking, se: seeding, LC: level of contamination)

Category	Study	Type	N° Sample	Sample	Code	Strain	TC	LC (CFU/ 25g)	Reference method: final result	Alternative method			Discordance
										Vidas test	Confirmation	Final results	
Meat products ❶	PV	m1+	B1	Ground beef	/	/	/	/	-	+	*L.mono*	+	PD
	PV	m1+	B3	Ground beef	/	/	/	/	-	+	*L.mono*	+	PD
	PV	m1+	J4	Turkey escalope	/	/	/	/	-	+	*L.mono*	+	PD
	PV	m2+	C16	Frozen beef balls	/	/	/	/	*+ L.mono L.innocua*	-	*L.innocua*	-	ND
	PV	m3+	C8	Dry sausage	/	/	/	/	*+ L.mono*	-	*L.mono*	-	ND
	PV	m3+	D16	Dry sausage	/	/	/	/	*+ L.mono*	-	*L.mono*	-	ND
Dairy products ❷	PV	d1+	N1	Cow cheese (Rollot of picardie)	L7	*L. mono*	sp	3,4	*+ L.mono*	-	*L.mono*	-	ND
	PV	d1+	Q15	Raw milk	L62	*L. mono*	sp	6,0	*+ L.mono*	-	*no colony on plate*	-	ND
	PV	d3+	V2	Cow Organic Cheese (St Félicien)	/	/	/	/	*+ L.mono*	-	*L.mono*	-	ND
	PV	d3+	U8	Cow cheese	L32	*L. mono 4b*	sp	1,2	-	+	*L.mono*	+	PD
	PV	d3+	R4	Cow cheese (Mont dor)	/	*L. mono*	/	0,1	*+ L.mono*	-	*no colony on plate*	-	ND
	PV	d3+	Y2	Cow cheese (Saint Nectaire)	L11	*L. mono 1/2a*	sp	3,2	-	+	*L.mono*	+	PD
	PV	d3+	W7	Cow cheese (Reblochon)	L40	*L. mono 1/2a*	sp	3,5	*+ L.mono*	-	*L.mono*	-	ND
	PV	d3+	T12	Cow cheese (Camembert)	/	*L. mono*	/	5,0	-	+	*L.mono*	+	PD
	PV	d3+	W5	Cow cheese	L40	*L. mono 1/2a*	sp	6,6	-	+	*L.mono*	+	PD
Seafood products ❸	PV	s1+	A7	Fish trio	/	/	/	/	*+ L.mono*	-	*no colony on plate*	-	ND
	PV	s2+	J7	Smoked eels	/	/	/	/	*+ L.mono*	-	*no colony on plate*	-	ND
Vegetal products ❹	PV	v1+	M5	Raw cutted carrots	/	/	/	/	-	+	*L.mono*	+	PD
	PV	v1+	J15	Mix 3 peppers under vacuum	L31	L. mono	sp	4,3	-	+	*L.mono*	+	PD
	PV	v2+	D1	Frozen fries	/	/	/	/	*- L.grayi*	+	*L.mono*	+	PD
	PV	v2+	I9	Frozen fries	/	/	/	/	-	+	*L.mono*	+	PD
	PV	v2+	K5	Traditional Frozen fries	/	/	/	/	-	+	*L.mono*	+	PD
	PV	v2+	O15	Frozen fries	/	/	/	/	-	+	*L.mono*	+	PD
	PV	v3+	A6	Saffron rice and vegetables	/	/	/	/	*+ L.mono*	-	*no colony on plate*	-	ND
	PV	v3+	J21	Cucumber vinaigrette	L47	L. mono	sp	17	-	+	*L.mono*	+	PD

Category	Study	Type	N° Sample	Sample	Code	Strain	TC	LC (CFU/ 25g)	Reference method: final result	Alternative method			Discordance
										Vidas test	Confirmation	Final results	
Composite foods ❺	PV	c1+	F7	Smoked salmon, soft cheese, dill	/	/	/	/	-	+	*L.mono*	+	PD
	I 17	c1+	VC1	Salad with pasta, tuna and vegetables	L.4.26	*L.mono* 1/2a	Se : 72h at 5°C	1.0	-	+	*L.mono*	+	PD
	I 17	c1+	VC27	Sandwich with meat, tomato	L.4.23	*L.mono* 1/2a	Se : 72h at 5°C	2.6	-	+	*L.mono*	+	PD
	PV	c2+	C13	Filet of hake, rice and vegetables	/	/	/	/	-	+	*L.mono*	+	PD
	PV	c2+	B5	Chinese noodles and crunchy vegetables	/	/	/	/	*+ L.mono*	-	*no colony on plate (after LX broth: Lmono)*	-	ND
	I 17	c2+	VC 5	Cooked pasta with cheese	L.4.18	*L.mono* 1/2a	Se : 72h at 5°C	3.6	-	+	*L.mono*	+	PD
	I 17	c2+	VC 28	Pizza	L.4.23	*L.mono* 1/2a	Se : 72h at 5°C	2.6	-	+	*L.mono*	+	PD
	I 17	c2+	VC 15	Galette of black corn	L.4.47	*L.mono* 4b	Se : 72h at 5°C	2.0	*+ L.mono*	-	-	-	ND
	I 17	c2+	VC 17	Vegetable gratin with pork	L.4.47	*L.mono* 4b	Se : 72h at 5°C	2.0	*+ L.mono*	-	-	-	ND
	I 17	c2+	VC 19	Chinese pasta with vegetables	L.4.32	*L.mono* 1/2b	Se : 72h at 5°C	2.4	*+ L.mono*	-	-	-	ND
	I 17	C3+	VC 61	Hazelnut cake	L.4.29	*L.mono* 1/2b	Se : 72h at 5°C	1.8	-	+	*L.mono*	+	PD
Environ-mental samples ❻	PV	e1+	O18	Water rinsing	/	/	/	/	*+ L.mono L.innocua*	-	*L.innocua*	-	ND
	PV	e2+	B16	Surface sample Workshop cutting table	/	/	/	/	-	+	*L.mono*	+	PD
	PV	e2+	M12	Surface sample Slicer stand delicatessen				0,6	-	+	*L.mono*	+	PD
	PV	e3+	M10	Meat products residue	/	/	/	/	*+*	-	*no colony on plate*	-	ND
	PV	e3+	Q14	Residues wast meat product	L214	*L. mono*	sp	21	*+*	-	-	-	ND

- **Negative deviations:**

A positive result is obtained by the reference method whereas a negative result is obtained by the alternative method.

Eighteen negative deviations were observed (including ten for samples naturally contamined):

- 10 negative deviations (d1+: Q15, d3+:R4, s1+:A7, s2+:J7, v3+: A6, c2+: VC15, c2+: VC17, c2+: VC19, e3+:M10, e3+:Q14): the protocol of the alternative method was applied and non typical colonies were observed. Due to the difference of sampling between the two methods, no cell of *L. monocytogenes* may have been taken in the sampling for the alternative method.

- 2 negative deviations (m2+: C16, e1+: O18): the protocol of the alternative method was applied and colonies of *Listeria* other than *L. monocytogenes* were observed but no typical colonies of *L.monocytognes*. Due to the difference of sampling between both methods, no cell of *L. monocytogenes* may have been taken in the sampling for the alternative method.

- 5 negative deviations (m3+:C8, m3+:D16, d1+: N1,d3+: V2, d3+: W7) are false negative results, highlighted by the confirmation protocol of the alternative method. It is probable that the enrichment did not allow to reach the threshold of the VIDAS LMX method.

- 1 negative deviation (c2+:B5) is a false negative result. The confirmation protocol of the alternative method was applied and non typical colonies were observed. However a second enrichnment in LX broth followed by an isolation on selective agar media showed the presence of typical colonies confirmed as *L. monocytogenes*. It is probable that the enrichment did not allow to reach the threshold of the VIDAS LMX method.

- **Positive deviations:**

A positive result is obtained by the alternative method whereas a negative result is obtained by the reference method.

Twenty-three positive deviations (m1+: B1, m1+: B3, m1+: J4, d3+: U8, d3+: Y2, d3+: T12, d3+: W5, v1+: M5, v1+: J15, v2+: D1, v2+: I9, v2+:K5, v2+: O15, v3+: J21, c1+: F7, c1+: VC1, c1+: VC27, c2+: C13, c2+: VC5, c2+: VC28,c3+: VC61, e2+: B16, e2+: M12) were observed. Due to the difference of sampling between the two methods, no cell of *L. monocytogenes* may have been present in the sampling of the reference method.

Table 7 show the differences between negative deviations and positive deviations and the acceptability limits for each category.

Table 7: acceptability limits

Category	Type	TND	PD	(TND-PD)	Acceptability limit (AL)	Observation
Meat products ❶	m1	0	3	/	/	(TND-PD) ≤ AL for unpaired data
	m2	1	0			
	m3	2	0			
	Total	**3**	**3**	**0**	**$(TND - PD)_{AL}=3$**	
Dairy products ❷	d1	2	0	/	/	
	d2	0	0			
	d3	3	4			
	Total	**5**	**4**	**1**	**(TND – PD)AL=3**	
Seafood products ❸	s1	1	0	/	/	
	s2	1	0			
	s3	0	0			
	Total	**2**	**0**	**2**	**$(TND - PD)_{AL}=3$**	
Vegetal products ❹	v1	0	2	/	/	
	v2	0	4			
	v3	1	1			
	Total	**1**	**7**	**-6**	**$(TND - PD)_{AL}=3$**	
Composite foods ❺	c1	0	3	/	/	
	c2	4	3			
	c3	0	1			
	Total	**4**	**7**	**-3**	**$(TND - PD)_{AL}=4$**	
Environmental samples ❻	e1	1	0	/	/	
	e2	0	2			
	e3	2	0			
	Total	**3**	**2**	**1**	**$(TND - PD)_{AL}=3$**	
All categories	**Total**	**18**	**23**	**-5**	**$(TND - PD)_{AL}=7$**	

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

The alternative method produces results comparable to the reference method.

3.1.7. Study of the storage of the broths

A stability study of the enriched broths stored at 5±3°C for 72 hours was performed on all positive and discordant samples. The broths were reanalyzed and confirmed after storage (results in appendix 3).

Table 8 presents the modifications observed after storage of the broths for 72 h at 5±3°C.

Table 8: Modifications between samples analysed before (T0) and after storage at 5±3°C for 72 hours (T72h) (PV: Previous Validation, TC: type of contamination).

Category	Study	Type	N° Sample	Sample	Code	Strain	TC	CFU/25g	Concordance MR / AM	
									T0	T72h
Meat products ❶	PV	m3+	D16	Dry sausage	/	/	/	/	ND	PA
	PV	m3+	C7	Merguez	/	/	/	/	PA	ND
Dairy products ❷	PV	d1+	N1	Cow cheese (Rollot of Picardie)	L7	*L.mono*	Spiking	3,4	ND	PA
	PV	d3+	T12	Cow cheese (Camembert)	/	*L.mono*	/	5,0	PD	NA
Seafood products ❸	PV	s1+	C2	Shrimps	/	/	/	/	PA	ND
Composite foods ❺	I 17	c2+-	VC28	Pizza	LIS.4.23	*L.mono 1/2a*	Seeding	2.6	PD	NA
	I 17	c2+	VC12	Couscous	LIS.4.10	*L.mono 1/2a*	Seeding	8.0	PA	ND

Table 9 presents the differences between negative deviations and positive deviations and the acceptability limits for each category after storage of the broths for 72 h at 5±3°C.

Table 9: acceptability limits after conservation of the enriched broths

Category	Type	TND	PD	(TND-PD)	Acceptability limit (AL)	Observation
Meat products ❶	m1	0	3	/	/	(TND-PD) ≤ AL and (TND+PD) ≤ AL for paired data
	m2	1	0			
	m3	2	0			
	Total	**3**	**3**	**0**	**$(TND - PD)_{AL}=3$**	
Dairy products ❷	d1	1	0	/	/	
	d2	0	0			
	d3	3	3			
	Total	**4**	**3**	**1**	**$(TND - PD)_{AL}=3$**	
Seafood products ❸	s1	2	0	/	/	
	s2	1	0			
	s3	0	0			
	Total	**3**	**0**	**3**	**$(TND - PD)_{AL}=3$**	
Vegetal products ❹	v1	0	2	/	/	
	v2	0	4			
	v3	1	1			
	Total	**1**	**7**	**-6**	**$(TND - PD)_{AL}=3$**	
Composite foods ❺	c1	0	3	/	/	
	c2	5	2			
	c3	0	1			
	Total	**5**	**6**	**-1**	**$(TND - PD)_{AL}=3$**	
Environmental samples ❻	e1	1	0	/	/	
	e2	0	2			
	e3	2	0			
	Total	**3**	**2**	**1**	**$(TND - PD)_{AL}=3$**	
All categories	**Total**	**19**	**21**	**-2**	**$(TND - PD)_{AL}=6$**	

The observed values are below or equal to the acceptability limits for each category.
The alternative method produces results comparable to the reference method. It is possible to store the incubated LMX broth for 72 hours at 2-8°C before performing the VIDAS LMX assay and/or confirmation.

3.2. Relative level of detection study

3.2.1. Matrices

Different "strain-matrix" couples were studied in parallel with the reference method and the VIDAS LMX method, for the studied categories.

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 monocytogenes* using the reference method was also performed to check the absence of the target analyte in the matrix.

Characteristics of the strain and of the matrix are shown in table 10.

Table 10 : « matrix – strain » couples of the relative level of detection

Category	Matrix	Strain	Code	Strain origin	Study
❶ **Meat products**	Rillettes	*L. monocytogenes* 1/2b	/	/	*2009*
❷ **Dairy products**	Raw milk	*L. monocytogenes* 1/2b	/	/	*2009*
	Raw milk cheese (specific protocol)	*L. monocytogenes* 1/2a	/	/	*2010*
❸ **Seafood products**	Smoked salmon	*L. monocytogenes* 1/2a	/	/	*2009*
❹ **Vegetal products**	Grated red cabbage	*L. monocytogenes* 4b	/	/	*2009*
❺ **Composite foods**	Salad of pasta	*L. monocytogenes 3a*	*LIS.4.46*	*Goat cheese sandwich*	*2017*
	Mixed salad	*L. monocytogenes 1/2a*	*LIS.4.5*	*Ham and vegetables*	*2017*
❻ **Environmental samples**	Process water	*L. monocytogenes* 1/2c	/	/	*2009*

3.2.2. Protocol of contamination

- **Protocol for categories 1, 2, 3, 4 and 6**

One negative control and several levels of contaminations (4 or 5) were tested.
Six replicates for each level of contamination were inoculated and analysed by the reference method and by the alternative method.
As the two methods have no common step, test portions of 25 g were prepared for each level of contamination and individually inoculated with a calibrated bacterial suspension. Several dilutions of a calibrated and low-concentrated suspension of *Listeria monocytogenes* were used to spike the samples before analysis.

- **Protocol for the category 5**

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.

3.2.3. Results and calculation of the RLoDs

Raw results are shown in appendix 4.

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. Values of the RLODs are presented in table 11.

Table 11 : RLODs values for the categories of the application scope (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	AL	RLOD	RLODL	RLODU	b=ln (RLOD)	sd(b)	z-Test statistic	p-value
Rillettes	2.5	**1.194**	0.470	3.033	0.177	0.466	0.381	0.703
Raw milk	2.5	**0.735**	0.312	1.735	-0.307	0.429	0.716	1.526
Raw milk cheese	2.5	**0.760**	0.256	2.261	-0.274	0.545	0.503	1.385
Smoked salmon	2.5	**0.725**	0.222	2.362	-0.322	0.591	0.545	1.414
Grated red cabbage	2.5	**1.520**	0.504	4.583	0.419	0.552	0.759	0.448
Mixed salad	2.5	**0.272**	0.071	1.038	-1.303	0.670	1.945	1.948
Salad of pasta	2.5	**1.151**	0.519	2.553	0.141	0.398	0.354	0.723
Process water	2.5	**0.665**	0.293	1.510	-0.407	0.410	0.994	1.680
Combined	**2.5**	**0.860**	**0.639**	**1.158**	**-0.151**	**0.149**	**1.015**	**1.690**

The LOD_{50} calculations according to Wilrich & Wilrich POD-LOD calculation program - version 13, are given in Table 12.

Table 12: $LOD_{50\%}$ for the alternative and reference method

Matrix	Strain	$LOD_{50\%}$ (CFU/25g) alternative method	$LOD_{50\%}$ (CFU/25g) Reference method
Rillettes	*L. monocytogenes* 1/2b	**0.903**	0.787
Raw milk	*L. monocytogenes* 1/2b	**0.387**	0.514
Raw milk cheese	*L. monocytogenes* 1/2a	**0.561**	0.683
Smoked salmon	*L. monocytogenes* 1/2a	**0.344**	0.441
Grated red cabbage	*L. monocytogenes* 4b	**0.621**	0.474
Mixed salad	*L. monocytogenes 3a*	**0.563**	1.351
Salad of pasta	*L. monocytogenes* 1/2a	**0.452**	0.396
Process water	*L. monocytogenes* 1/2c	**0.303**	0.468
Combined results		**0.494**	**0.579**

3.2.4. Interpretation and conclusion

The RLODs values are below the acceptability limits, meaning that, as stated in ISO 16140-2/A1 (2024), the maximum increase in LOD of the alternative versus the reference method is not considered as relevant in consideration of the fitness for purpose of the method.

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

3.3. Inclusivity and exclusivity study

3.3.1. Test protocols

- **Protocol for inclusivity**

A culture of each *Listeria monocytogenes* strain was prepared in a nutritive broth. A supplemented LMX broth was then inoculated with around 10 *Listeria monocytogenes* cells per 225 ml and incubated for 26 hours at 37°C before carrying out the VIDAS LMX test.

- **Protocol for exclusivity**

The different negative strains were cultured at 37°C for 24 h and diluted in nutritive broth. Non-selective broths were inoculated to obtain levels of around 10^5 cells in 225 ml broth before carrying out the VIDAS LMX test.

In the event of results discordant with the expected results, a new assay must be performed with, in parallel, the reference method and the complete VIDAS LMX method.

3.3.2. Results

The results are presented in appendix 5.

Sixty strains of *Listeria monocytogenes* were detected out of the 60 tested by the VIDAS LMX method. Note, however, that 2 of them (L15 and L176) required the addition of 25 ml of UHT milk in order to obtain a positive test. Analysis of the L124 strain in LMX broth gave a weakly positive result (TV=0.05). A new test with the addition of UHT milk gave a TV=0.2.
The study of 31 strains not belonging to the genus *Listeria* or non-*Listeria monocytogenes* showed cross-reactions with one strain of *Bacillus sphaericus* and two strains of *Staphylococcus* (*S. intermedius* and *S. aureus*) after enrichment in the non-selective enrichment broth.
For these 3 non-target strains, the test values (TV) were just above the threshold and the inoculation levels were high. Negative results were obtained after enrichment in the selective broth for the method.

3.3.3. Conclusion

The selectivity of the method is satisfactory.

3.4. Practicability

1. Storage conditions of the components (see package insert) – Expiration date of unopened products (see package insert)

The storage temperature of the VIDAS LMX kit is 2-8°C.

The kit expiration date is shown on the box label and on the various vials.

2. Conditions of use after first use (see package insert)

The kit components should be stored at 2-8°C. If stored as recommended (pouch correctly resealed with desiccant after use, etc.), all the components will remain stable until the expiration date indicated on the label.

3. Time-to-result

Step	**Time required (Day)** VIDAS LMX method	**Time required (Day)** EN ISO 11290-1 standard
Pre-enrichment	D0	D0
Inoculation of Fraser	/	D1
Inoculation of LX broth	D1 (specific protocol only)	/
Streaking on selective media	/	D1 & D2
Perform VIDAS LMX test	D1	/
Plate reading	/	D4
Obtention of negative results (if no characteristic colonies**)**	**D1**	**D4 to D5**
Confirmation testing	/	D2 to D5
Obtention of negative results (after negative confirmation testing if necessary)	**D2**	**D5 to D11**
Step	**Time required (Day)** VIDAS LMX method	**Time required (Day)** EN ISO 11290-1 standard
Obtention of positive results (confirmation of typical colonies)	**D2 to D8**	**D8 to D11**
- Confirmation by reference method tests (CAMP-test, haemolysis, etc.), including purification	D4 to D8	D4 to D7
- Confirmation by reference method tests (CAMP-test, haemolysis, sugars (identification gallery)	D4	/
- Confirmation by plating on chromogenic medium	D2	/

4. Steps common to the reference method

Confirmation testing (reference method tests including purification)

4. Interlaboratory study

4.1. Organization of the interlaboratory study

4.1.1. Participating laboratories

The interlaboratory study was realized by the Expert Laboratory and by sixteen collaborators.

4.1.2. Experimental parameters

- Matrix: pasteurized milk (25 ml)
- Strain: *Listeria monocytogenes* (dairy product origin).
- Number of samples per laboratory: 24 samples per method were prepared to represent 3 levels of contamination, with 8 samples per level for each method (48 samples per parcel).

4.1.3. Control of the experimental parameters

4.1.3.1. Samples preparation and spiking

The following table shows the contamination rates obtained and the estimated accuracies:

Table 13: contamination levels

Level	Samples	Targeted theoretical level (CFU/25 g)	Real level (CFU/25 g)
Level 0 (L_0)	5-6-9-10-13-14-19-20 27-28-35-36-41-42-43-44	0	0
Low level (L_1)	3-4-11-12-17-18-23-24 29-30-31-32-39-40-45-46	3	3,26
High level (L_2)	1-2-7-8-15-16-21-22 25-26-33-34-37-38-47-48	30	22,2

4.1.3.2. Temperature and state of the samples

Analysis of temperature monitoring curves during transport

Temperatures registered by the temperature probes during shipment were stable and were between 0°C and 8°C for all the collaborators.

Receipt temperatures and receipt times

The measured temperatures are listed in the table below.

Table 14: temperature measurements

Collaborator	Temperatures (°C)		Comments
	communicated by the collaborator	measured by the temperature probe	
A	3.1	1.2	
B	4.5	2.5	
C	3.3	1.5	
D	4.2	4.0	
E	2.7	3.0	
F	Not communicated	2.5	Withdrawn
G	Not communicated	1.5	
H	2.6	3.0	
I	6.0	3.5	
J	4.1	4.0	Receipt at D1, assays at D2
K	6.1	0.1	
L	4.8	-0.4	
M	1.4	2.1	
N	3.9	3.5	
O	7.0	/	Receipt at D2
P	6.0	4.1	Receipt at D2

Fourteen of the 16 collaborators received their samples the day after they were sent.

4.2. Results

Twelve laboratories out of the 16 laboratories were finally retained for the study (exclusion of laboratories F, J, O and P).

4.2.1. Total viable counts

For the whole laboratories, the total viable counts at 30°C vary between 350 CFU/g and 20 000 CFU/g.

4.2.2. Expert Laboratory results

The results obtained by the Expert Laboratory are summarized in table 15 (raw results in appendix 6).

Table 15 : positive results obtained by Expert Laboratory by both methods

Contamination level	Alternative method	Reference method
L_0	0/8	0/8
L_1	7/8	8/8
L_2	8/8	8/8

The results are consistent with those expected.

4.2.3. Collaborators results

The results are summarized in table 16. Raw results in appendix 6.

- Reference and alternative methods results

Table 16 : results for all laboratories

Alternative method							Reference method			
Lab.	L_0		L_1		L_2		Lab.	L_0	L_1	L_2
	Before. Conf.	After. Conf.	Before. Conf.	After. Conf.	Before. Conf.	After. Conf.				
A	0 / 8	0 / 8	8 / 8	8 / 8	8 / 8	8 / 8	A	0 / 8	8 / 8	8 / 8
B	0 / 8	0 / 8	8 / 8	8 / 8	8 / 8	8 / 8	B	0 / 8	8 / 8	8 / 8
C	0 / 8	0 / 8	8 / 8	8 / 8	8 / 8	8 / 8	C	0 / 8	8 / 8	8 / 8
D	0 / 8	0 / 8	8 / 8	8 / 8	8 / 8	8 / 8	D	0 / 8	8 / 8	8 / 8
E	0 / 8	0 / 8	8 / 8	8 / 8	8 / 8	8 / 8	E	0 / 8	8 / 8	8 / 8
G	0 / 8	0 / 8	8 / 8	8 / 8	8 / 8	8 / 8	F	0 / 8	8 / 8	8 / 8
H	0 / 8	0 / 8	8 / 8	8 / 8	**4** / 8	**4** / 8	G	0 / 8	8 / 8	8 / 8
I	0 / 8	0 / 8	8 / 8	8 / 8	8 / 8	8 / 8	H	0 / 8	8 / 8	8 / 8
K	0 / 8	0 / 8	8 / 8	8 / 8	**7** / 8	**7** / 8	I	0 / 8	8 / 8	**7** / 8
L	0 / 8	0 / 8	8 / 8	8 / 8	8 / 8	8 / 8	J	0 / 8	8 / 8	8 / 8
M	0 / 8	0 / 8	8 / 8	8 / 8	8 / 8	8 / 8	K	0 / 8	8 / 8	8 / 8
N	0 / 8	0 / 8	8 / 8	8 / 8	8 / 8	8 / 8	L	0 / 8	8 / 8	8 / 8
Total	**0 / 96**	**0 / 96**	**96 / 96**	**96 / 96**	**91 / 96**	**91 / 96**	**Total**	**0 / 96**	**96 / 96**	**95 / 96**

For the level L_2, the laboratory H found 4 negative results with the alternative method VIDAS LMX. The isolation on the different agar plates were carried out a second time (reisolation of the LMX broth on Ottaviani & Agosti agar, incubation at 37°C then subculture on Ottaviani & Agosti agar) and confirmed the first result.
These samples were probably not contaminated by the Expert Laboratory. It's important to notice that these samples are the last 4 of the series of 8 samples contaminated at the high level (L_2).
Nevertheless, the results of this laboratory H were kept in the exploitation of the results following the request of the Technical Committee.

For the high level of contamination L_2, the laboratory K found one sample with a negative result by the reference method and one sample with a negative result by the alternative method. None deviation on the instructions was reported by the laboratory K, the results was exploited.

4.2.4. Analysis of the results and collaborators selected for the statistical analysis

The results of 12 laboratories were considered.

4.2.5. Interpretation of the results and statistical analysis

4.2.5.1. Interpretation of the results

The interpretation of the results is shown in the table below.

Table 17 : tests results for both methods (PA: positive agreement, TNA: total negative agreement, TND: total negative deviation, PD: positive deviation)

Level	Alternative method (AM)	Reference method (RM)		
		RM+	RM-	Total
L_0	AM+	PA= 0	PD= 0	0
	AM-	TND= 0	TNA= 96	96
	Total	**0**	**96**	**96**
L_1	AM+	PA= 96	PD= 0	96
	AM-	TND= 0	TNA= 0	0
	Total	**96**	**0**	**96**
L_2	AM+	PA= 90	PD= 1	91
	AM-	TND= 5	TNA= 0	5
	Total	**95**	**1**	**96**
L_1+L_2	AM+	PA= 186	PD= 1	187
	AM-	TND= 5	TNA= 0	5
	Total	**191**	**1**	**192**

4.2.5.2. Specificity of the methods

The percentage specificity of the reference method and the alternative method is calculated using the data after confirmation, based on th results of level L_0.

- Specificity of the reference method: $SP_{ref} = \left[1 - \left(\frac{P_0}{N\_}\right)\right] \times 100\%$ = 100.0%,

- Specificity of the alternative method: $SP_{alt} = \left[1 - \left(\frac{CP_0}{N\_}\right)\right] \times 100\%$ = 100.0%,

where:
$N\_$ is the number of all L_0 tests;
P_0 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.

4.2.5.3. Sensitivity of the two methods, relative trueness and false positive ratio of the alternative method

The sensitivity of the two methods, the relative trueness of the alternative method and the false positive ratio of the two methods are calculated. Results are presented in the table 18.

Table 18 : summary of the sensitivity study results for all the categoriesof the application scope

Parameter	ISO 16140-2 formulas	Results for all the categories
Sensitivity of the alternative method	$SE_{alt} = \frac{(PA + PD)}{(PA + TND + PD)} x\ 100\ \%$	94.8%
Sensitivity of the reference method	$SE_{ref} = \frac{(PA + TND)}{(PA + TND + PD)} x\ 100\ \%$	99%
Relative trueness	$RT = \frac{(PA + TNA)}{N} x100\ \%$	93.8%
False positive ratio	$FPR = \frac{PA_{FP(alt)} + PD_{FP\ (alt)}}{TNA} x\ 100\ \%$	0.0%
False negative ratio	$FNR = \frac{NA_{FN(alt)} + ND_{FN(alt)}}{PA + TND + PD}$	0.00

4.2.5.4. Determination of the acceptability limit and conclusion

The difference between (TND – PD) for the level where fractional recovery was obtained (L_2) is calculated. The observed value found for (TND – PD) shall not be higher than the acceptability limit (AL). The AL is defined as [$(TND - PD)_{max}$] 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
Px = number of samples with a positive result obtained with the reference method at level x, (L_1 or L_2) for all laboratories;
Nx = 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
CPx = number of samples with a confirmed positive result obtained with the alternative method at level x (L_1 or L_2) for all laboratories;
Nx = number of samples tested at level x (L_1 or L_2) with the alternative method by all laboratories.

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

where
Nx = the total number of samples tested for level x (L_1 or L_2) 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_2 only. The different parameters obtained by the calculation are detailed in the table below:

Table 19 : values obtained for the determination of the acceptability limit

Parameter	Value
N_{L2} : number of samples tested at level 2	96
$(p+)_{ref}$	0.989
$(p+)_{alt}$	0.948
$(TND\text{-}PD)_{max}$	4.22
(TND-PD)	4

The value (ND-PD) is inferior to the AL, so the requirements of the standard ISO 16140-2/ A1 (2024) are fulfilled.

The performance of the alternative method and the reference method can be considered as equivalent.

4.2.5.5. Determination of the relative level of detection

The RLOD was calculated using the EN ISO 16140-2:2016 Excel spreadsheet available at http://standards.iso.org/iso/16140/-2/ed-1/en/RLOD_inter-lab-study_16140-2_AnnexF_ver1_28-06-2017.xls.

As there is limited experience with the interpretation of this approach, the results are used only for information. Results are shown in the table below :

Table 20 : values obtained for the determination of the relative level of detection

Method	LOD50%	LOD95%	RLOD
Reference	0.83 [0.63 ; 1.10]	3.60 [2.71 ; 4.77]	**2.02 [1.48 – 2.77]**
Alternative	1.68 [1.31 ; 2.17]	7.28 [5.65 ; 9.38]	

5. General conclusion

- **Method comparison study**

The performances of the VIDAS LMX test are comparable to those of the standard ISO 11290-1:2017.

This study concerned 495 samples of six categories of products:

- Meat products
- Dairy products
- Seafood products
- Vegetal products
- Composite foods
- Environmental samples

Values obtained for the criteria of the sensitivity study are the following, depending on the incubation times and the protocol of confirmation:

- sensitivity of the alternative method : 90.5%
- sensitivity of the reference method : 90.9%
- relative trueness: 90.6%
- false positive ratio: 0%
- false negative ratio: 0.02

Some discordant results were observed. These discordances may be mostly linked to the sampling which is different between the two methods in an unpaired study.

The relative level of detection of the alternative method and the reference method was evaluated for all categories. The results are comparable between the two methods. It varies between 0.665 and 1.520 CFU in 25 g for the alternative method for all categories.

The specificity of the method is satisfactory.

The study of the practicability of the alternative method shows a simple and easy-to-use method and significant time savings compared to the reference method.

- **Interlaboratory study**

Concerning the interlaboratory study, the results obtained for the selected laboratories showed that the performance of the alternative method and the reference method can be considered as equivalent.

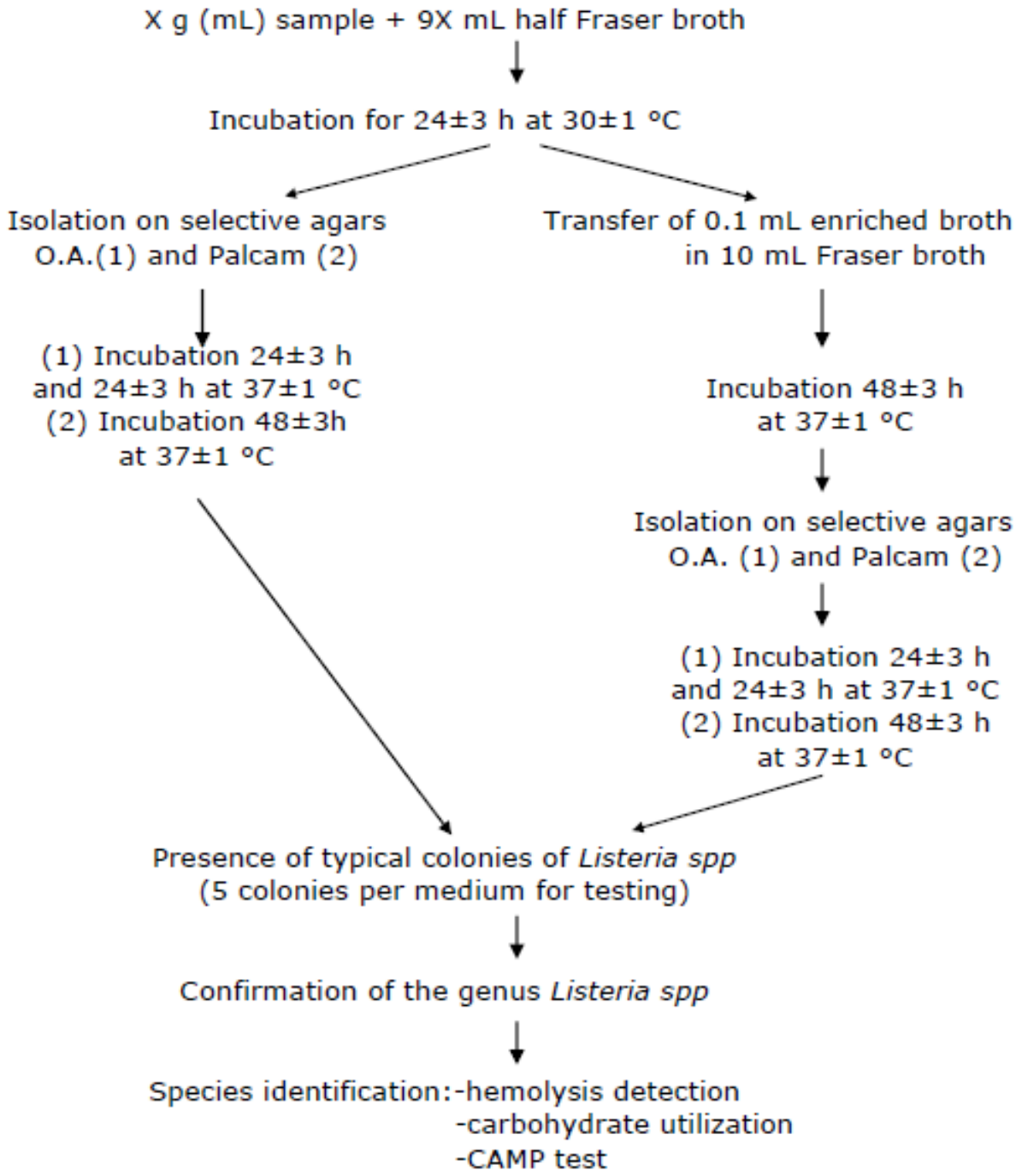
Le Lion d'Angers, December 18, 2026
Guillaume MESNARD
Method Validation Supervisor

APPENDIX 1

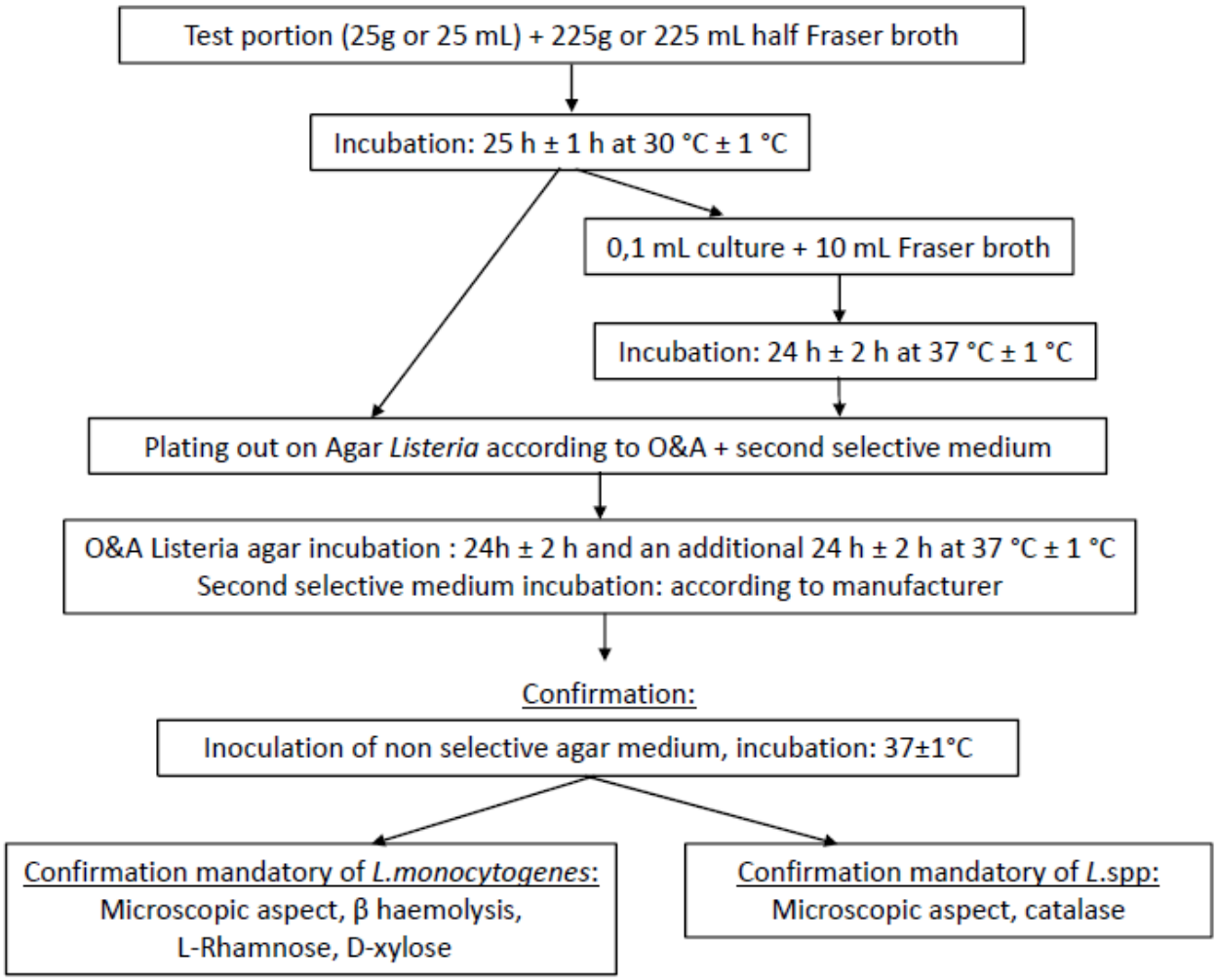
Protocols of the reference method

and of the alternative method

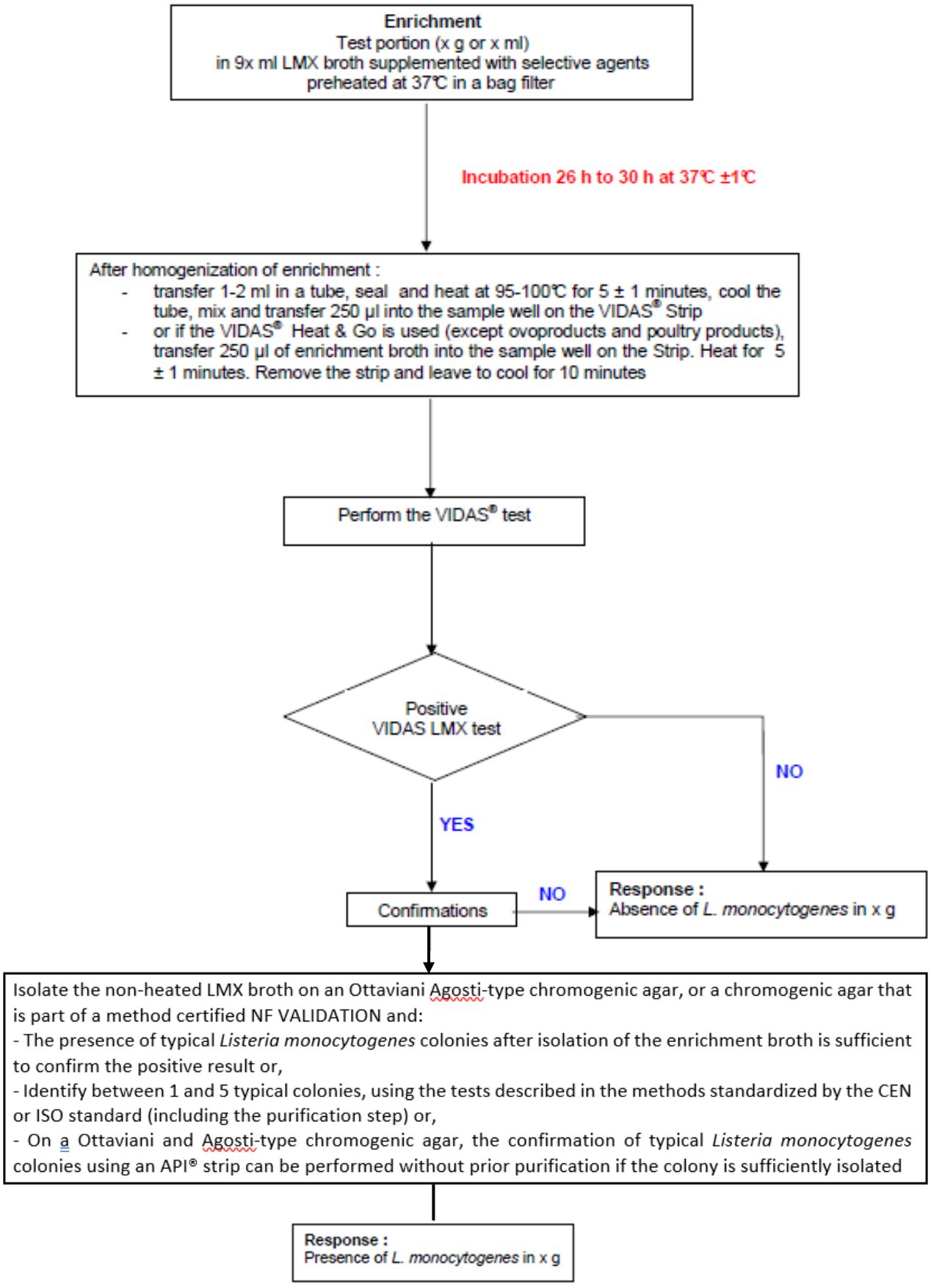
EN ISO 11290-1/A1 : 2004



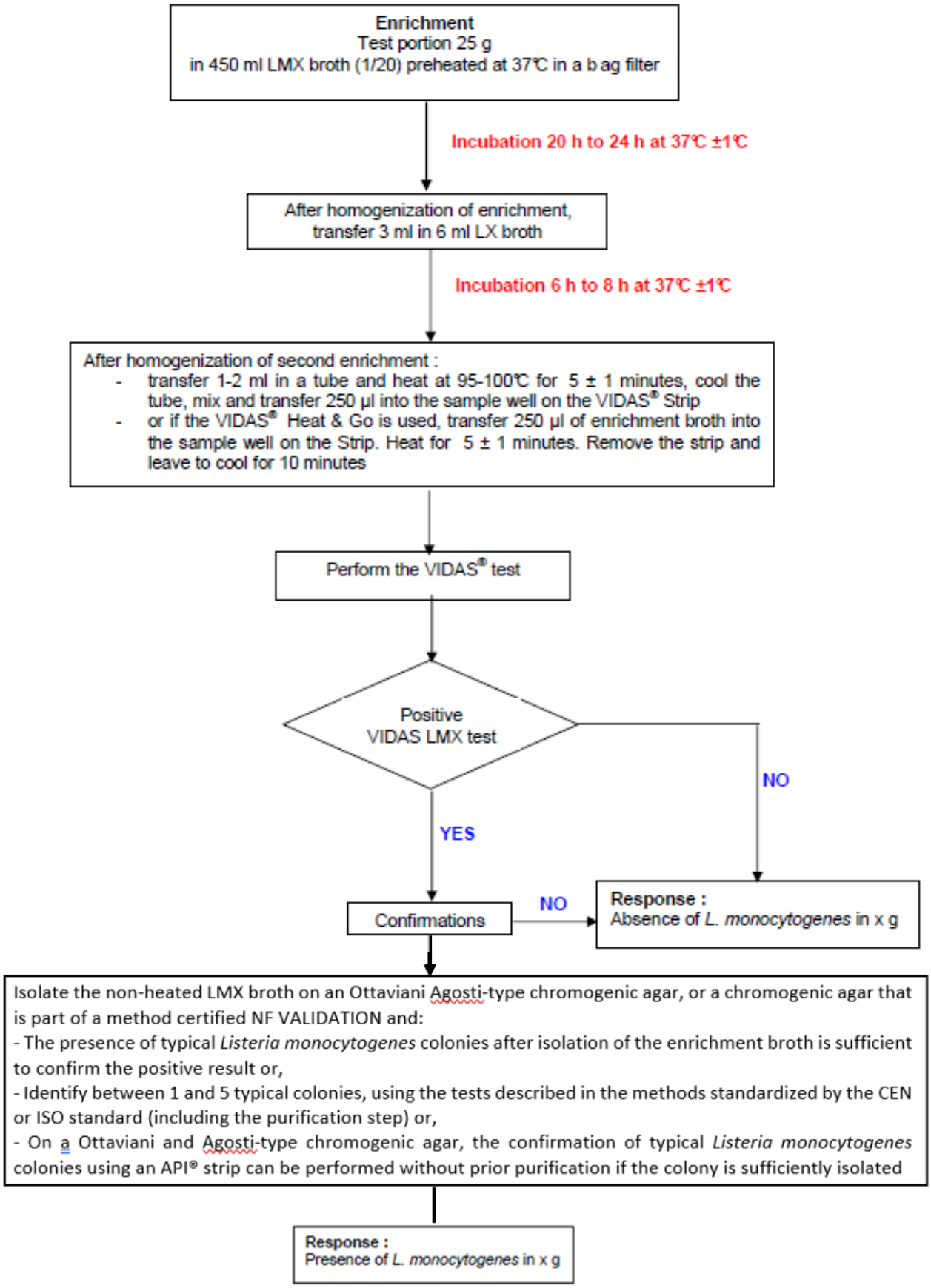
EN ISO 11290-1 / 2017



VIDAS LMX : general protocol



VIDAS LMX : specific protocol for raw milk cheeses



APPENDIX 2

Artificial contaminations

Code	Sample	Category	Artificial contamination					
			Strain			Stress		
			N°	*Strain*	Origin	Type	Evaluation	CFU/25g
G19	New water	EN1	L141	*Listeria monocytogenes*	Environment	30 minutes at 55°C then 30 minutes at -80°C	nd	8,1
G20	Frozen water	EN1	L141	*Listeria monocytogenes*	Environment	30 minutes at 55°C then 30 minutes at -80°C	nd	16,2
G21	Surface delicatessen stand floor	EN2	L141	*Listeria monocytogenes*	Environment	30 minutes at 55°C then 30 minutes at -80°C	nd	12,2
I1	Zucchini	PV3	L29	*Listeria monocytogenes*	Potato	45 minutes at 55°C then 30 minutes at -80°C	>2,92	1,7
I2	Vegetable gardener	PV3	L29	*Listeria monocytogenes*	Potato	45 minutes at 55°C then 30 minutes at -80°C	>2,92	2,5
I3	Carrot puree	PV3	L29	*Listeria monocytogenes*	Potato	45 minutes at 55°C then 30 minutes at -80°C	>2,92	2,1
I4	Plain grated carrots	PV2	L29	*Listeria monocytogenes*	Potato	45 minutes at 55°C then 30 minutes at -80°C	>2,92	3,3
J14	Frozen minced onions	PV1	L31	*Listeria monocytogenes*	Parsley	45 minutes at 55°C then 30 minutes at -80°C	0,5	3,4
J15	Mix 3 peppers under vacuum	PV2	L31	*Listeria monocytogenes*	Parsley	45 minutes at 55°C then 30 minutes at -80°C	0,5	4,3
J16	Plain grated carrots	PV2	L47	*Listeria monocytogenes*	Hash browns	45 minutes at 55°C then 30 minutes at -80°C	3,4	27,2
J17	Raw vacuum-packed zucchini	PV2	L47	*Listeria monocytogenes*	Hash browns	45 minutes at 55°C then 30 minutes at -80°C	3,4	13,6
J18	Carrots raw slices under vacuum	PV2	L47	*Listeria monocytogenes*	Hash browns	45 minutes at 55°C then 30 minutes at -80°C	3,4	20,4
J19	Fresh vacuum-packed green beans	PV2	L31	*Listeria monocytogenes*	Parsley	45 minutes at 55°C then 30 minutes at -80°C	0,5	6,8
J20	Seasoned carrots and cabbage	PV3	L31	*Listeria monocytogenes*	Parsley	45 minutes at 55°C then 30 minutes at -80°C	0,5	5,1
J21	Cucumber vinaigrette	PV3	L47	*Listeria monocytogenes*	Hash browns	45 minutes at 55°C then 30 minutes at -80°C	3,4	17,0
L2	Couscous vegetables	PV3	L58	*Listeria monocytogenes*	Salad	45 minutes at 55°C then 30 minutes at -80°C	0,5	3,9
L3	Green beans with garlic	PV3	L58	*Listeria monocytogenes*	Salad	45 minutes at 55°C then 30 minutes at -80°C	0,5	1,9
L4	Grated carrots	PV2	L58	*Listeria monocytogenes*	Salad	45 minutes at 55°C then 30 minutes at -80°C	0,5	4,9
M1	Mixed salad	PV2	L125	*Listeria monocytogenes*	Fried vegetables	45 minutes at 55°C then 30 minutes at -80°C	0,6	0,7
M2	Maches	PV2	L125	*Listeria monocytogenes*	Fried vegetables	45 minutes at 55°C then 30 minutes at -80°C	0,6	0,6
M3	Green beans	PV3	L125	*Listeria monocytogenes*	Fried vegetables	45 minutes at 55°C then 30 minutes at -80°C	0,6	0,3
M4	Red cabbage vinaigrette	PV3	L125	*Listeria monocytogenes*	Fried vegetables	45 minutes at 55°C then 30 minutes at -80°C	0,6	0,4
M12	PS Meat stand slicer	EN2	L149	*Listeria monocytogenes*	Environment	45 minutes at 55°C then 30 minutes at -80°C	0,5	0,6
M13	Surface dirty knife	EN2	L149	*Listeria monocytogenes*	Environment	45 minutes at 55°C then 30 minutes at -80°C	0,5	0,9
M14	Water	EN1	L149	*Listeria monocytogenes*	Environment	45 minutes at 55°C then 30 minutes at -80°C	0,5	1,2
M15	Water	EN1	L149	*Listeria monocytogenes*	Environment	45 minutes at 55°C then 30 minutes at -80°C	0,5	1,5
N1	Rollot de picardie (pasteurized)	PL1	L7	*Listeria monocytogenes*	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,6	3,4
N2	Epoisses (pasteurized)	PL1	L7	*Listeria monocytogenes*	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,6	6,8
N3	Raw milk	PL1	L7	*Listeria monocytogenes*	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,6	8,5
N4	Raw milk	PL1	L7	*Listeria monocytogenes*	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,6	5,1
N5	Cucumber vinaigrette	PV3	L119	*Listeria monocytogenes*	Spinach	30 minutes at 55°C then 30 minutes at -80°C	1,4	8,8
N6	Mixed vegetables (4th range)	PV2	L119	*Listeria monocytogenes*	Spinach	30 minutes at 55°C then 30 minutes at -80°C	1,4	13,2
O1	Carrots + celery	PV3	L129	*Listeria monocytogenes*	Hash browns	30 minutes at 55°C then 30 minutes at -80°C	0,8	6,4
O2	Spring vegetable casserole	PV2	L129	*Listeria monocytogenes*	Hash browns	30 minutes at 55°C then 30 minutes at -80°C	0,8	4,8
O3	Iceberg lettuce	PV2	L129	*Listeria monocytogenes*	Hash browns	30 minutes at 55°C then 30 minutes at -80°C	0,8	9,6
O4	Oak leaves	PV2	L129	*Listeria monocytogenes*	Hash browns	30 minutes at 55°C then 30 minutes at -80°C	0,8	8,0
O5	Pasteurized "little goats"	PL2	L37	*Listeria monocytogenes*	Raw milk maroille	30 minutes at 55°C then 30 minutes at -80°C	0,5	7,2
O7	Pasteurized goat's cream	PL2	L37	*Listeria monocytogenes*	Raw milk maroille	30 minutes at 55°C then 30 minutes at -80°C	0,5	4,8
O8	Chaource	PL1	L37	*Listeria monocytogenes*	Raw milk maroille	30 minutes at 55°C then 30 minutes at -80°C	0,5	9,6
Q14	Meat waste bin residue	EN3	L214	*Listeria monocytogenes*	Environment	35 minutes at 55°C then 30 minutes at -80°C	2,9	21,0
Q15	Raw milk	PL1	L62	*Listeria monocytogenes*	Reblochon	35 minutes at 55°C then 30 minutes at -80°C	0,3	6,0
Q16	Raw milk	PL1	L62	*Listeria monocytogenes*	Reblochon	35 minutes at 55°C then 30 minutes at -80°C	0,3	7,5
AI1	fruity cantal	PL1	L18	*Listeria monocytogenes*	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,3	5,2
AI8	Munster	PL1	L18	*Listeria monocytogenes*	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,3	10,4

Code	Sample	Category	Artificial contamination					
			Strain			Stress		
			N°	*Strain*	Origin	Type	Evaluation	CFU/25g
AG9	raw milk	PL1	L18	*Listeria monocytogenes*	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,3	7,8
AF2	Little goat	PL2	L7	*Listeria monocytogenes* 1/2a	Munster crust	35 minutes at 55°C then 30 minutes at -80°C	1,2	1,4
AF7	Goat log	PL2	L32	*Listeria monocytogenes* 4b	Munster crust	35 minutes at 55°C then 30 minutes at -80°C	1,0	6,3
AF10	Goat cheese	PL2	L9	*Listeria monocytogenes* 1/2a	Munster crust	35 minutes at 55°C then 30 minutes at -80°C	0,7	2,6
AG2	Blue cheese	PL2	L11	*Listeria monocytogenes* 1/2a	Munster crust	35 minutes at 55°C then 30 minutes at -80°C	0,6	5,2
AG5	Bresse Blue	PL2	L37	*Listeria monocytogenes* 1/2b	Raw milk maroille	35 minutes at 55°C then 30 minutes at -80°C	0,4	10,4
AH14	Goat log	PL2	L120	*L.monocytogenes*	Munster	Culture in NaCl10%, then 30 minutes at 55°C, 30 minutes at -80°C	1,1	4,6
H15	Trou du cru (Cow cheese)	PL1	L120	*L.monocytogenes*	Munster	Culture in NaCl10%, then 30 minutes at 55°C, 30 minutes at -80°C	1,1	6,8
H16	Maroilles	PL1	L120	*L.monocytogenes*	Munster	Culture en NaCl10%, then 30 minutes at 55°C, 30 minutes at -80°C	1,1	6,1
AI4	Bresse Blue	PL2	L40	*Listeria monocytogenes* 1/2a	Munster crust	30 minutes at 55°C, 30 minutes at -80°C	1,4	6,4
T1	Reblochon raw milk	FLC	L123	*Listeria monocytogenes* 4b	Mozzarella	45 minutes at 55°C then 30 minutes at -80°C	1,0	0,7
T2	Brie de Meaux	FLC	L123	*Listeria monocytogenes* 4b	Mozzarella	45 minutes at 55°C then 30 minutes at -80°C	1,0	0,6
T3	Crotin Chavignol raw milk	FLC	L123	*Listeria monocytogenes* 4b	Mozzarella	45 minutes at 55°C then 30 minutes at -80°C	1,0	1,1
T4	Raw milk Camembert	FLC	L123	*Listeria monocytogenes* 4b	Mozzarella	45 minutes at 55°C then 30 minutes at -80°C	1,0	0,9
T5	Raw milk goat	FLC	L229	*Listeria monocytogenes* 4e	Reblochon	45 minutes at 55°C then 30 minutes at -80°C	0,5	0,2
T6	Small raw milk munster	FLC	L229	*Listeria monocytogenes* 4e	Reblochon	45 minutes at 55°C then 30 minutes at -80°C	0,5	0,1
T7	Small reblochon	FLC	L229	*Listeria monocytogenes* 4e	Reblochon	45 minutes at 55°C then 30 minutes at -80°C	0,5	0,2
T8	Raw milk Camembert	FLC	L229	*Listeria monocytogenes* 4e	Reblochon	45 minutes at 55°C then 30 minutes at -80°C	0,5	0,2
U1	Caprifeullié goat cheese raw milk	FLC	L9	*Listeria monocytogenes* 1/2a	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	>1,3	0,0
U2	Munster raw milk	FLC	L9	*Listeria monocytogenes* 1/2a	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	>1,3	0,1
U3	Mont d'or raw milk	FLC	L9	*Listeria monocytogenes* 1/2a	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	>1,3	0,1
U4	Ossau Iraty farmer's raw milk	FLC	L32	*Listeria monocytogenes* 4b	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	1,2	0,1
U5	raw milk goat cheese	FLC	L32	*Listeria monocytogenes* 4b	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	1,2	0,1
U6	Beaufort raw milk	FLC	L32	*Listeria monocytogenes* 4b	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	1,2	0,1
U7	raw milk	FLC	L9	*Listeria monocytogenes* 1/2a	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	>1,3	0,1
U8	raw milk	FLC	L32	*Listeria monocytogenes* 4b	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	1,2	0,0
W1	Raw milk Camembert	FLC	L7	*Listeria monocytogenes* 1/2a	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,9	2,8
W2	Reblochon farmer's raw milk	FLC	L7	*Listeria monocytogenes* 1/2a	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,9	3,5
W3	Raw milk raclette	FLC	L7	*Listeria monocytogenes* 1/2a	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,9	1,4
W5	Farmer cheese	FLC	L40	*Listeria monocytogenes* 1/2a	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,7	6,6
W6	Ecume de Vimereux raw milk	FLC	L40	*Listeria monocytogenes* 1/2a	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,7	9,9
W7	Munster raw milk	FLC	L40	*Listeria monocytogenes* 1/2a	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,7	16,5
X1	Camembertde Normandie	FLC	L37	*Listeria monocytogenes* 1/2b	Raw milk maroille	30 minutes at 55°C then 30 minutes at -80°C	0,5	5,0
X2	Raw milk cheese	FLC	L37	*Listeria monocytogenes* 1/2b	Raw milk maroille	30 minutes at 55°C then 30 minutes at -80°C	0,5	8,0
X3	Raw milk morbier	FLC	L37	*Listeria monocytogenes* 1/2b	Raw milk maroille	30 minutes at 55°C then 30 minutes at -80°C	0,5	9,0
X4	raw milk goat cheese	FLC	L37	*Listeria monocytogenes* 1/2b	Raw milk maroille	30 minutes at 55°C then 30 minutes at -80°C	0,5	7,0
X5	Raw milk Camembert	FLC	L63	*Listeria monocytogenes* 4e	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,6	14,4
X6	raw milk goat cheese	FLC	L63	*Listeria monocytogenes* 4e	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,6	18,0
X7	Small reblochon	FLC	L63	*Listeria monocytogenes* 4e	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,6	21,6
X8	Raw milk raclette	FLC	L63	*Listeria monocytogenes* 4e	Munster crust	30 minutes at 55°C then 30 minutes at -80°C	0,6	25,2
Y1	raw milk	FLC	L11	*Listeria monocytogenes* 1/2a	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	0,8	3,7
Y2	Brie de Meaux	FLC	L11	*Listeria monocytogenes* 1/2a	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	0,8	3,2
Y3	Raw milk Camembert	FLC	L11	*Listeria monocytogenes* 1/2a	Munster crust	45 minutes at 55°C then 30 minutes at -80°C	0,8	2,7
Y5	Raw milk cheese	FLC	L51	*Listeria monocytogenes 1/2b*	Germain matured	45 minutes at 55°C then 30 minutes at -80°C	0,6	7,4

Artificial contaminations 2017

Category	Sample number	Sample	Code strain	Strain	Origin	Protocol of seeding	Inoculation level (CFU/25g)	Global result
Meat products	1	Beef bourguignon	LIS 4.26	*Listeria monocytogenes 1/2a*	Ham	48h at 5±3 °C	2,2	+
	3	Blanquette of veal	LIS 4.26	*Listeria monocytogenes 1/2a*	Ham	48h at 5±3 °C	2,2	+
	5	Osso bucco	LIS 4.26	*Listeria monocytogenes 1/2a*	Ham	48h at 5±3 °C	2,2	+
	7	Chicken wings	LIS 4.27	*Listeria monocytogenes 1/2a*	Ground beef	48h at 5±3 °C	2,6	+
	9	Rabbit stew	LIS 4.27	*Listeria monocytogenes 1/2a*	Ground beef	48h at 5±3 °C	2,6	+
	11	Roasted pig with caramel sauce	LIS 4.27	*Listeria monocytogenes 1/2a*	Ground beef	48h at 5±3 °C	2,6	+
	13	Blanquette of turkey	LIS 4.27	*Listeria monocytogenes 1/2a*	Ground beef	48h at 5±3 °C	2,6	+
Dairy products	15	Pasteurized sheep cheese	LIS 4.59	*Listeria monocytogenes*	Goat raw milk	48h at 5±3 °C	2,4	+
	17	Neuf châtel with raw milk	LIS 4.59	*Listeria monocytogenes*	Goat raw milk	48h at 5±3 °C	2,4	+
	19	Camembert with raw milk	LIS 4.59	*Listeria monocytogenes*	Goat raw milk	48h at 5±3 °C	2,4	+
	21	Coulommiers with raw milk	LIS 4.59	*Listeria monocytogenes*	Goat raw milk	48h at 5±3 °C	2,4	+
Seafood products	23	Smoked salmon	LIS 4.83	*Listeria monocytogenes 1/2a*	Salmon tartare	48h at 5±3 °C	2,2	+
	25	Smoked trout	LIS 4.15	*Listeria monocytogenes 1/2a*	Salmon tartare	48h at 5±3 °C	2,2	+
	27	Tarama with cod eggs	LIS 4.15	*Listeria monocytogenes 1/2a*	Salmon tartare	48h at 5±3 °C	2,2	+
	29	Surimi	LIS 4.15	*Listeria monocytogenes 1/2a*	Salmon tartare	48h at 5±3 °C	2,2	+
	31	Atum rillette	LIS 4.83	*Listeria monocytogenes*	Fish with lemon sauce and rice	48h at 5±3 °C	1,8	+
	33	Salmon rillette	LIS 4.83	*Listeria monocytogenes*	Fish with lemon sauce and rice	48h at 5±3 °C	1,8	+
	35	Sardine rillette	LIS 4.83	*Listeria monocytogenes*	Fish with lemon sauce and rice	48h at 5±3 °C	1,8	+
Vegetal products	39	Banana	LIS 4.10	*Listeria monocytogenes 1/2a*	Salad	48h at 5±3 °C	2,2	+
	41	Grape	LIS 4.10	*Listeria monocytogenes 1/2a*	Salad	48h at 5±3 °C	2,2	+
	43	Tomato	LIS 4.10	*Listeria monocytogenes 1/2a*	Salad	48h at 5±3 °C	2,2	+
	45	Plums red	LIS 4.10	*Listeria monocytogenes 1/2a*	Salad	48h at 5±3 °C	2,2	+
	47	Mixed vegetables	LIS 4.35	*Listeria monocytogenes 1/2c*	Sandwich chef salad	48h at 5±3 °C	2.4	+
	49	Peas	LIS 4.35	*Listeria monocytogenes 1/2c*	Sandwich chef salad	48h at 5±3 °C	2.4	+
	51	White beans	LIS 4.35	*Listeria monocytogenes 1/2c*	Sandwich chef salad	48h at 5±3 °C	2.4	+
RTE-RTRH	53	Taboulet with chicken	LIS 4.6	*Listeria monocytogenes 1/2a*	Sandwich with ham and emmental	48h at 5±3 °C	2,2	+
	55	strabourgeoise salad	LIS 4.6	*Listeria monocytogenes 1/2a*	Sandwich with ham and emmental	48h at 5±3 °C	2,2	+
	57	Pièmontaise with ham	LIS 4.6	*Listeria monocytogenes 1/2a*	Sandwich with ham and emmental	48h at 5±3 °C	2,2	+
	59	Sandwich with salmon and chives	LIS 4.6	*Listeria monocytogenes 1/2a*	Sandwich with ham and emmental	48h at 5±3 °C	2,6	+
	61	Sandwich with ham and Emmental	LIS 4.24	*Listeria monocytogenes 1/2a*	Dairy meal	48h at 5±3 °C	2,6	+
	63	Sandwich with tuna and crudities	LIS 4.24	*Listeria monocytogenes 1/2a*	Dairy meal	48h at 5±3 °C	2,6	+
	65	Sandwich with ham and butter	LIS 4.24	*Listeria monocytogenes 1/2a*	Dairy meal	48h at 5±3 °C	2,6	+
	67	Sandwich with rosette and butter	LIS 4.24	*Listeria monocytogenes 1/2a*	Dairy meal	48h at 5±3 °C	2,6	+
	69	Raspberries tart	LIS 4.46	*Listeria monocytogenes 3a*	Goat cheese sandwich	48h at 5±3 °C	1,8	+
	71	Mille feuille	LIS 4.7	*Listeria monocytogenes 1/2a*	Ham and emmental sandwich	48h at 5±3 °C	2,8	+
	73	Savarin with rhum and pastry cream	LIS 4.7	*Listeria monocytogenes 1/2a*	Ham and emmental sandwich	48h at 5±3 °C	2,8	+
Environmental samples	75	Processed water 1	LIS 4.2	*Listeria monocytogenes*	Environment	48h at 5±3 °C	2,2	+
	77	Processed water 2	LIS 4.2	*Listeria monocytogenes*	Environment	48h at 5±3 °C	2,2	+
	79	Processed water 3	LIS 4.2	*Listeria monocytogenes*	Environment	48h at 5±3 °C	2,2	+
	81	Processed water 4	LIS 4.2	*Listeria monocytogenes*	Environment	48h at 5±3 °C	2,6	+
	83	Surface sample 1	LIS 4.50	*Listeria monocytogenes 4b*	Surface control on salmon	48h at 5±3 °C	2,6	+
	85	Surface sample 2	LIS 4.50	*Listeria monocytogenes 4b*	Surface control on salmon	48h at 5±3 °C	2,6	+

APPENDIX 3

Sensitivity Raw results

Key:

Neg. = Negative
Pos. = Positive
L. = Listeria

NA= Negative agreement
PA= Positive agreement
PD= Positive deviation
ND= Negative deviation

Meat products

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Meat products	1-	A14	Steaks, chopped	*No*	/	*L. welshimeri*	Neg.	5	0,00	-	/	Neg.	NA
2009	Meat products	1-	A15	Ground beef	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Meat products	1-	B2	Ground beef	*No*	/	*L. welshimeri*	Neg.	4	0,00	-	/	Neg.	NA
2009	Meat products	1-	B7	Steaks, chopped 15% fat	*No*	/	*L. welshimeri*	Neg.	3	0,00	-	/	Neg.	NA
2009	Meat products	1-	B8	Steaks, chopped 15% fat	*No*	/	*L. welshimeri*	Neg.	3	0,00	-	/	Neg.	NA
2009	Meat products	1-	C5	Frozen chopped steak	*No*	/	*L. welshimeri*	Neg.	1	0,00	-	/	Neg.	NA
2009	Meat products	1-	C20	Traditional minced meat	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Meat products	1-	D6	Ground beef halal	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Meat products	1-	D10	Frozen Burgers	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Meat products	1-	F4	Chicken breats	*No*	/	/	Neg.	7	0,00	-	/	Neg.	NA
2009	Meat products	1-	J2	Chicken fillets	*No*	/	*L. welshimeri*	Neg.	22	0,00	-	/	Neg.	NA
2009	Meat products	2-	A4	Chicken marinated in Thai style	*No*	/	*L. innocua*	Neg.	2	0,00	-	/	Neg.	NA
2009	Meat products	2-	A8	Chicken with Cajun spices	*No*	/	/	Neg.	2	0,00	-	/	Neg.	NA
2009	Meat products	2-	C2	Chicken with mozzarella	*No*	/	/	Neg.	2	0,00	-	/	Neg.	NA
2009	Meat products	2-	G1	Mexican spicy pork chops	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Meat products	2-	E5	Black pudding	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Meat products	2-	H16	Pie	*No*	/	/	Neg.	7	0,00	-	/	Neg.	NA
2009	Meat products	2-	H17	Pate of head parsley	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2017	Meat products	2-	2	Beef bourguignon	*No*	/	/	Neg.	-1	0,00	-	/	Neg.	NA
2017	Meat products	2-	4	Blanquette of veal	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2017	Meat products	2-	6	Osso bucco	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Meat products	3-	B22	Smoked bacon	*No*	/	/	Neg.	2	0,00	-	/	Neg.	NA
2009	Meat products	3-	E18	chipolatas	*No*	/	*L.welshimeri*	Neg.	5	0,00	-	/	Neg.	NA
2009	Meat products	3-	F5	Sausages with kebab	*No*	/	/	Neg.	57	0,01	-	/	Neg.	NA
2009	Meat products	3-	F9	Pork Sausages	*No*	/	/	Neg.	17	0,00	-	/	Neg.	NA
2009	Meat products	3-	D19	Rosette	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Meat products	3-	H15	Smoked ham	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Meat products	3-	H18	Bacon	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2017	Meat products	3-	52	Ham	*No*	/	/	Neg.	1	0,00	-	/	Neg.	NA
2017	Meat products	3-	54	Prime ham	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2017	Meat products	3-	56	Raw ham	*No*	/	/	Neg.	2	0,00	-	/	Neg.	NA
2009	Meat products	1+	B1	Ground beef	*No*	/	/	Neg.	6 685	2,13	+	*L.mono*	Pos.	PD
2009	Meat products	1+	B3	Ground beef	*No*	/	/	Neg.	10 137	3,24	+	*L.mono*	Pos.	PD
2009	Meat products	1+	J4	Turkey escalope	*No*	/	/	Neg.	7 164	2,21	+	*L.mono*	Pos.	PD
2009	Meat products	1+	A16	Ground meat of horse	*No*	/	*L..mono*	Pos.	10 206	3,26	+	*L.mono*	Pos.	PA
2009	Meat products	1+	D20	chicken thigh	*No*	/	*L..mono L.welshimeri*	Pos.	9 852	3,14	+	*L.mono*	Pos.	PA
2009	Meat products	1+	H5	Frozen chopped steaks	*No*	/	*L..mono L.welshimeri*	Pos.	12 396	3,82	+	*L.mono*	Pos.	PA
2009	Meat products	1+	J3	Duck leg	*No*	/	*L..mono*	Pos.	8 085	2,49	+	*L.mono*	Pos.	PA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Meat products	1+	J5	Duck leg	*No*	/	*L..mono*	Pos.	10 737	3,31	+	*L.mono*	Pos.	PA
2009	Meat products	1+	K11	Steaks, chopped, pure beef	*No*	/	*L.mono L.innocua*	Pos.	11 983	3,70	+	*L.mono*	Pos.	PA
2009	Meat products	2+	C16	Frozen beef balls	*No*	/	*L.mono L.innocua*	Pos.	113	0,03	-	*L.innocua* *Isol. LX: L.innocua*	Neg.	ND
2009	Meat products	2+	A18	Thai Chicken	*No*	/	*L.mono L.innocua*	Pos.	6 405	2,04	+	*L.mono*	Pos.	PA
2009	Meat products	2+	J1	Marinated chicken escalope	*No*	/	*L.mono*	Pos.	11 077	3,42	+	*L.mono*	Pos.	PA
2017	Meat products	2+	1	Beef bourguignon	*se*	*2,2*	*L.mono*	Pos.	10 912	2,77	+	*L.m*	Pos.	PA
2017	Meat products	2+	3	Blanquette of veal	*se*	*2,2*	*L.mono*	Pos.	10 610	2,69	+	*L.m*	Pos.	PA
2017	Meat products	2+	5	Osso bucco	*se*	*2,2*	*L.mono*	Pos.	10 915	2,77	+	*L.m*	Pos.	PA
2017	Meat products	2+	7	Chicken wings	*se*	*2,6*	*L.mono*	Pos.	10 804	2,74	+	*L.m*	Pos.	PA
2017	Meat products	2+	9	Rabbit stew	*se*	*2,6*	*L.mono*	Pos.	10 824	2,75	+	*L.m*	Pos.	PA
2017	Meat products	2+	11	Roasted pig with caramel sauce	*se*	*2,6*	*L.mono*	Pos.	10 682	2,71	+	*L.m*	Pos.	PA
2017	Meat products	2+	13	Blanquette of turkey	*se*	*2,6*	*L.mono*	Pos.	10 838	2,75	+	*L.m*	Pos.	PA
2009	Meat products	3+	B20	merguez	*No*	/	*L..mono L.welshimeri*	Pos.	9 345	2,98	+	*L.mono*	Pos.	PA
2009	Meat products	3+	B21	chipolatas	*No*	/	*L..mono L.welshimeri*	Pos.	10 543	3,37	+	*L.mono*	Pos.	PA
2009	Meat products	3+	C7	merguez	*No*	/	*L.mono L..innocua*	Pos.	449	0,14	+	*L.mono*	Pos.	PA
2009	Meat products	3+	C9	Smoked bacon	*No*	/	*L.mono L.welshimeri*	Pos.	10 307	3,29	+	*L.mono*	Pos.	PA
2009	Meat products	3+	C19	chipolatas	*No*	/	*L.mono*	Pos.	219	0,07	+	*L.mono*	Pos.	PA
2009	Meat products	3+	D14	Smoked bacon	*No*	/	*L.mono L.welshimeri*	Pos.	222	0,07	+	*L.mono*	Pos.	PA
2009	Meat products	3+	D15	Smoked bacon	*No*	/	*L.mono*	Pos.	9 986	3,19	+	*L.mono*	Pos.	PA
2009	Meat products	3+	C8	Dry sausage	*No*	/	*L.mono*	Pos.	5	0,00	-	*L.mono*	Neg.	ND
2009	Meat products	3+	D16	Dry sausage	*No*	/	*L.mono*	Pos.	97	0,03	-	*L.mono* *Isol. LX: L.mono*	Neg.	ND FN_{alt}
2009	Meat products	3+	B19	Bacon	*No*	/	*L.mono L.welshimeri*	Pos.	2 791	0,89	+	*L.mono*	Pos.	PA
2009	Meat products	3+	C4	White Ham	*No*	/	*L.mono*	Pos.	11 035	3,52	+	*L.mono*	Pos.	PA
2009	Meat products	3+	C17	White Ham	*No*	/	*L.mono*	Pos.	10 874	3,47	+	*L.mono*	Pos.	PA
2009	Meat products	3+	D2	Ham pieces	*No*	/	*L.mono L.welshimeri*	Pos.	1 327	0,42	+	*L.mono*	Pos.	PA

Meat products : storage for 72 hours at 2-8°C

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Meat products	1+	B1	Ground beef	*No*	/	/	Neg.	11 765	3,76	+	*L. monocytogenes*	Pos.	PD
2009	Meat products	1+	B3	Ground beef	*No*	/	/	Neg.	10 390	3,32	+	*L. monocytogenes*	Pos.	PD
2009	Meat products	1+	J4	Turkey escalope	*No*	/	/	Neg.	8 850	2,73	+	*L. monocytogenes*	Pos.	PD
2009	Meat products	1+	A16	Ground meat of horse	*No*	/	*L. monocytogenes*	Pos.	10 104	3,23	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	1+	D20	chicken thigh	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	3 391	1,06	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	1+	H5	Frozen chopped steaks	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	10 605	3,27	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	1+	J3	Duck leg	*No*	/	*L. monocytogenes*	Pos.	854	0,26	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	1+	J5	Duck leg	*No*	/	*L. monocytogenes*	Pos.	10 522	3,24	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	1+	K11	Steaks, chopped, pure beef	*No*	/	*L. monocytogenes* *L. innocua*	Pos.	11 355	3,54	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	2+	C16	Frozen beef balls	*No*	/	*L. monocytogenes* *L. innocua*	Pos.	128	0,04	-	*L. innocua* *Isol. LX: L.innocua*	Neg.	ND
2009	Meat products	2+	A18	Thai Chicken	*No*	/	*L. monocytogenes* *L. innocua*	Pos.	11 409	3,64	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	2+	J1	Marinated chicken escalope	*No*	/	*L. monocytogenes*	Pos.	9 837	3,03	+	*L. monocytogenes*	Pos.	PA
2017	Meat products	2+	1	Beef bourguignon	*se*	*2,2*	*L. monocytogenes*	Pos.	10 670	2,71	+	*L. monocytogenes*	Pos.	PA
2017	Meat products	2+	3	Blanquette of veal	*se*	*2,2*	*L. monocytogenes*	Pos.	10 784	2,74	+	*L. monocytogenes*	Pos.	PA
2017	Meat products	2+	5	Osso bucco	*se*	*2,2*	*L. monocytogenes*	Pos.	11 083	2,82	+	*L. monocytogenes*	Pos.	PA
2017	Meat products	2+	7	Chicken wings	*se*	*2,6*	*L. monocytogenes*	Pos.	10 663	2,71	+	*L. monocytogenes*	Pos.	PA
2017	Meat products	2+	9	Rabbit stew	*se*	*2,6*	*L. monocytogenes*	Pos.	10 751	2,73	+	*L. monocytogenes*	Pos.	PA
2017	Meat products	2+	11	Roasted pig with caramel sauce	*se*	*2,6*	*L. monocytogenes*	Pos.	10 675	2,71	+	*L. monocytogenes*	Pos.	PA
2017	Meat products	2+	13	Blanquette of turkey	*se*	*2,6*	*L. monocytogenes*	Pos.	10 195	2,59	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	3+	B20	merguez	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	9 940	3,17	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	3+	B21	chipolatas	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	10 114	3,23	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	3+	C7	merguez	*No*	/	*L. monocytogenes* *L. innocua*	Pos.	1 666	0,53	+	*L. innocua* *Isol. LX: L.innocua*	Neg.	PA FP_{alt}
2009	Meat products	3+	C9	Smoked bacon	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	10 037	3,20	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	3+	C19	chipolatas	*No*	/	*L. monocytogenes*	Pos.	10 834	3,46	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	3+	D14	Smoked bacon	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	3 562	1,11	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	3+	D15	Smoked bacon	*No*	/	*L. monocytogenes*	Pos.	10 008	3,12	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	3+	C8	Dry sausage	*No*	/	*L. monocytogenes*	Pos.	108	0,03	-	*L. monocytogenes*	Neg.	ND FN_{alt}
2009	Meat products	3+	D16	Dry sausage	*No*	/	*L. monocytogenes*	Pos.	5 967	1,86	+	*L. monocytogenes*	Pos.	PA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
					Type	Level	CONFIRMATION	Final result	Detection			Confirmation	Final result	
							Identification		RFV	VT	Test result	*Identification*		
2009	Meat products	3+	B19	Bacon	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	9 206	2,94	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	3+	C4	White Ham	*No*	/	*L. monocytogenes*	Pos.	10 661	3,40	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	3+	C17	White Ham	*No*	/	*L. monocytogenes*	Pos.	10 265	3,28	+	*L. monocytogenes*	Pos.	PA
2009	Meat products	3+	D2	Ham pieces	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	2 821	0,88	+	*L. monocytogenes* *Isol. LX: L.monocytogenes*	Pos.	PA

Dairy products

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Dairy products	1-	S1	squeegee	*No*	/	/	Abs.	1	0,00	-	/	Abs.	NA
2009	Dairy products	1-	P8	Pasteurized Couloumiers	*No*	/	/	Abs.	4	0,00	-	/	Abs.	NA
2009	Dairy products	1-	AF26	Young Cantal	*No*	/	*L.innocua*	Abs.	4	0,00	-	/	Abs.	NA
2009	Dairy products	1-	AG21	Ccow cheese (Rond du vinage)	*No*	/	/	Abs.	7	0,00	-	/	Abs.	NA
2009	Dairy products	1-	N13	Raw milk	*No*	/	/	Abs.	5	0,00	-	/	Abs.	NA
2009	Dairy products	1-	Q6	Infant Milk Powder	*No*	/	/	Abs.	7	0,00	-	/	Abs.	NA
2017	Dairy products	1-	8	UHT milk	*No*	/	/	Abs.	1	0,00	-	/	Abs.	NA
2017	Dairy products	1-	10	Emmental	*No*	/	/	Abs.	1	0,00	-	/	Abs.	NA
2017	Dairy products	1-	12	Camembert	*No*	/	/	Abs.	2	0,00	-	/	Abs.	NA
2017	Dairy products	1-	14	Pasteurized milk	*No*	/	/	Abs.	2	0,00	-	/	Abs.	NA
2009	Dairy products	2-	E9	Petit Bethmale with goat cheese	*No*	/	/	Abs.	10	0,00	-	/	Abs.	NA
2009	Dairy products	2-	E10	Goat cheese	*No*	/	/	Abs.	9	0,00	-	/	Abs.	NA
2009	Dairy products	2-	N10	Goat cheese	*No*	/	/	Abs.	8	0,00	-	/	Abs.	NA
2009	Dairy products	2-	P5	Goat cheese	*No*	/	/	Abs.	5	0,00	-	/	Abs.	NA
2009	Dairy products	2-	P6	Goat cheese (Chabichou of poitou)	*No*	/	/	Abs.	6	0,00	-	/	Abs.	NA
2009	Dairy products	2-	P7	Pasteurized goat's cheese	*No*	/	/	Abs.	2	0,00	-	/	Abs.	NA
2009	Dairy products	2-	AB3	Goat cheese	*No*	/	/	Abs.	2	0,00	-	/	Abs.	NA
2009	Dairy products	2-	AE1	Ewe cheese (Ricotta)	*No*	/	/	Abs.	2	0,00	-	/	Abs.	NA
2009	Dairy products	2-	AE4	Goat cheese	*No*	/	/	Abs.	3	0,00	-	/	Abs.	NA
2009	Dairy products	2-	AB3	Goat cheese	*No*	/	/	Abs.	2	0,00	-	/	Abs.	NA
2009	Dairy products	2-	AE1	Ewe cheese (Ricotta)	*No*	/	/	Abs.	2	0,00	-	/	Abs.	NA
2009	Dairy products	2-	AE4	Goat cheese	*No*	/	/	Abs.	3	0,00	-	/	Abs.	NA
2009	Dairy products	2-	AE5	Ewe cheese (Ossau Iraty)	*No*	/	/	Abs.	3	0,00	-	/	Abs.	NA
2010	Dairy products	3-	T10	Cow cheese from raw milk	*No*	/	/	Abs.	122	0,03	-	/	Abs.	NA
2010	Dairy products	3-	T13	Cow cheese from raw milk	*No*	/	/	Abs.	3	0,00	-	/	Abs.	NA
2010	Dairy products	3-	R14	Cow cheese from raw milk	*No*	/	/		13	0,00	-	/	Abs.	NA
2010	Dairy products	3-	R13	Cow cheese (Cantal fruity)	*No*	/	/	Abs.	5	0,00	-	/	Abs.	NA
2010	Dairy products	3-	T9	Cow cheese (Parmigiano)	*No*	/	/	Abs.	4	0,00	-	/	Abs.	NA
2010	Dairy products	3-	R12	Raw milk cheese	*No*	/	/	Abs.	7	0,00	-	/	Abs.	NA
2010	Dairy products	3-	V1	Cow cheese (Camembert)	*sp*	*Mix*	/	Abs.	4	0,00	-	/	Abs.	NA
2010	Dairy products	3-	V3	Cow cheese (Munster)	*sp*	*Mix*	/	Abs.	2	0,00	-	/	Abs.	NA
2010	Dairy products	3-	V4	Cow cheese (Brie de Meaux)	*sp*	*Mix*	/	Abs.	2	0,00	-	/	Abs.	NA
2010	Dairy products	3-	U6	Cow cheese (Beaufort)	*sp*	*0,05*	/	Abs.	6	0,00	-	/	Abs.	NA
2010	Dairy products	3-	U2	Cow cheese (Munster)	*sp*	*0,06*	/	Abs.	4	0,00	-	/	Abs.	NA
2010	Dairy products	3-	T6	Cow cheese (munster)	*sp*	*0,1*	/	Abs.	7	0,00	-	/	Abs.	NA
2010	Dairy products	3-	T8	Cow cheese (Camembert)	*sp*	*0,2*	/	Abs.	9	0,00	-	/	Abs.	NA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2010	Dairy products	3-	T7	Cow cheese (Small reblochon)	*sp*	*0,2*	/	Abs.	5	0,00	-	/	Abs.	NA
2010	Dairy products	3-	T2	Cow cheese (Brie de Meaux)	*sp*	*0,55*	/	Abs.	5	0,00	-	/	Abs.	NA
2010	Dairy products	3-	T1	Cow cheese (Reblochon)	*sp*	*0,74*	/	Abs.	5	0,00	-	/	Abs.	NA
2010	Dairy products	3-	T4	Cow cheese (Camembert)	*sp*	*0,93*	/	Abs.	5	0,00	-	/	Abs.	NA
2010	Dairy products	3-	Y3	Cow cheese (Camembert)	*sp*	*2,7*	/	Abs.	4	0,00	-	/	Abs.	NA
2010	Dairy products	3-	W1	Cow cheese (Camembert)	*sp*	*2,76*	/	Abs.	7	0,00	-	/	Abs.	NA
2010	Dairy products	3-	W6	Cow cheese (Ecume du Vimereux)	*sp*	*9,9*	/	Abs.	8	0,00	-	/	Abs.	NA
2010	Dairy products	3-	R3	Ewe Cheese parsley	*No*	/	/	Abs.	23	0,00	-	/	Abs.	NA
2010	Dairy products	3-	R8	Ewe Cheese	*No*	/	/	Abs.	6	0,00	-	/	Abs.	NA
2010	Dairy products	3-	U1	Goat cheese	*sp*	*0,04*	/	Abs.	5	0,00	-	/	Abs.	NA
2010	Dairy products	3-	U5	Goat cheese	*sp*	*0,07*	/	Abs.	6	0,00	-	/	Abs.	NA
2010	Dairy products	3-	U4	Ewe Cheese (Ossau Iraty)	*sp*	*0,08*	/	Abs.	4	0,00	-	/	Abs.	NA
2010	Dairy products	3-	T5	Goat cheese	*sp*	*0,15*	/	Abs.	5	0,00	-	/	Abs.	NA
2010	Dairy products	3-	T3	Goat cheese (Crotin Chavignol)	*sp*	*1,1*	/	Abs.	11	0,00	-	/	Abs.	NA
2017	Dairy products	3-	16	Neuf châtel with raw milk	*No*	/	/	A	-1	0,00	-	/	A	NA
2017	Dairy products	3-	18	Camembert with raw milk	*No*	/	/	A	0	0,00	-	/	A	NA
2010	Dairy products	3-	R11	Cow cheese (Epoisses)raw milk	*No*	/	/	Abs.	10	0,00	-	/	Abs.	NA
2009	Dairy products	1+	N1	Cow cheese (Rollot of Picardy)	*sp*	3,4	*L. monocytogenes*	Pos.	44	0,01	-	*L. monocytogenes*	Abs.	ND FN_{alt}
2009	Dairy products	1+	AI1	Cow cheese (Cantal)	*sp*	5,2	*L.monocytogenes*	Pos.	6 064	1,54	+	*L.monocytogenes*	Pos.	PA
2009	Dairy products	1+	AH16	Cow cheese (Maroilles)	*sp*	6,1	*L.monocytogenes*	Pos.	9 642	2,46	+	*L.monocytogenes*	Pos.	PA
2009	Dairy products	1+	N2	Cow cheese (Epoisses)	*sp*	6,8	*L. monocytogenes*	Pos.	3 175	0,98	+	*L. monocytogenes* *Isol Lx: L. monocytogenes*	Pos.	PA
2009	Dairy products	1+	AH15	Cow cheese (Trou du cru)	*sp*	6,8	*L.monocytogenes*	Pos.	9 258	2,36	+	*L.monocytogenes*	Pos.	PA
2009	Dairy products	1+	O8	Cow cheese (Chaource)	*sp*	9,6	*L. monocytogenes*	Pos.	2 115	0,65	+	*L. monocytogenes* *Isol Lx: L. monocytogenes*	Pos.	PA
2009	Dairy products	1+	AI8	Cow cheese (Munster)	*sp*	10,4	*L.monocytogenes*	Pos.	789	0,20	+	*L.monocytogenes*	Pos.	PA
2009	Dairy products	1+	N4	Raw milk	*sp*	5,1	*L. monocytogenes*	Pos.	8 398	2,60	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	1+	Q15	Raw milk	*sp*	6,0	*L. monocytogenes*	Pos.	5	0,00	-	/	Abs.	ND
2009	Dairy products	1+	Q16	Raw milk	*sp*	7,5	*L. monocytogenes*	Pos.	625	0,21	+	*L. monocytogenes* *Isol Lx: L. monocytogenes*	Pos.	PA
2009	Dairy products	1+	AG9	Raw milk	*sp*	7,8	*L.monocytogenes*	Pos.	3 011	0,74	+	*L.monocytogenes*	Pos.	PA
2009	Dairy products	1+	N3	Raw milk	*sp*	8,5	*L. monocytogenes*	Pos.	9 935	3,07	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	2+	AF2	Goat cheese	*sp*	1,4	*L.monocytogenes*	Pos.	11 618	3,09	+	*L.monocytogenes*	Pos.	PA
2009	Dairy products	2+	AF10	Goat cheese	*sp*	2,6	*L.monocytogenes*	Pos.	709	0,18	+	*L.monocytogenes*	Pos.	PA
2009	Dairy products	2+	AH14	Goat cheese	*sp*	4,6	*L.monocytogenes*	Pos.	9 578	2,44	+	*L.monocytogenes*	Pos.	PA
2009	Dairy products	2+	O7	Goat cheese	*sp*	4,8	*L. monocytogenes*	Pos.	10 405	3,22	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	2+	AG2	Blue cheese	*sp*	5,2	*L.monocytogenes*	Pos.	3 429	0,84	+	*L.monocytogenes*	Pos.	PA
2009	Dairy products	2+	AF7	Goat cheese	*sp*	6,3	*L.monocytogenes*	Pos.	8 695	2,31	+	*L.monocytogenes*	Pos.	PA
2009	Dairy products	2+	AI4	Bleu de Bresse	*sp*	6,4	*L.monocytogenes*	Pos.	12 033	3,07	+	*L.monocytogenes*	Pos.	PA

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					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Dairy products	2+	O5	Goat cheese	*sp*	7,2	*L. monocytogenes*	Pos.	11 570	3,58	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	2+	AG5	Blue cheese (bleu de Bresse)	*sp*	10,4	*L.monocytogenes*	Pos.	10 609	2,61	+	*L.monocytogenes*	Pos.	PA
2017	Dairy products	2+	15	Pasteurized sheep cheese	*se*	*2,4*	*L. monocytogenes*	Pos.	10 748	2,73	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	V2	Cow Organic Cheese (St Félicien)	*No*	/	*L. monocytogenes*	Pos.	30	0,00	-	*L. monocytogenes*	Pos.	ND FN_{alt}
2010	Dairy products	3+	X6	Raw milk cow cheese	*No*	/	*L. monocytogenes*	Pos.	10 845	3,00	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	T11	Raw milk cow cheese	*No*	/	*L. monocytogenes*	Pos.	10 546	2,91	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	U3	Raw milk cow cheese	*No*	/	*L. monocytogenes*	Pos.	10 416	2,88	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	X1	Raw milk cow cheese	*No*	/	*L. monocytogenes*	Pos.	10 488	2,90	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	X5	Raw milk cow cheese	*No*	/	*L.monocytogenes L. innocua*	Pos.	10 558	2,92	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	R1	Cow cheese (Reblochon)	*No*	/	*L. monocytogenes*	Pos.	11 305	3,12	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	R10	Ewe cheese parsley	*No*	/	*L. monocytogenes*	Pos.	3 860	1,06	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	W3	Ewe cheese parsley	*No*	/	*L. monocytogenes*	Pos.	313	0,08	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	U8	Cow cheese	*sp*	0,0	/	Abs.	10 325	2,91	+	*L. monocytogenes*	Pos.	PD
2010	Dairy products	3+	R4	Cow cheese (Mont dor)	*sp*	0,1	*L. monocytogenes*	Pos.	5	0,00	-	/	Abs.	ND
2010	Dairy products	3+	U7	Cow cheese	*sp*	0,1	*L.monocytogenes L. innocua*	Pos.	10 765	3,04	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	R2	Cow cheese (Raclette)	*sp*	1,4	*L. monocytogenes*	Pos.	318	0,10	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	X3	Goat cheese (Sainte Maure)	*sp*	2,1	*L. monocytogenes*	Pos.	2 268	0,73	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	X4	Cow cheese (Brie de Meaux)	*sp*	3,2	*L. monocytogenes*	Pos.	1 362	0,40	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	Y2	Cow cheese (Saint Nectaire)	*sp*	3,2	/	Abs.	5 321	1,50	+	*L. monocytogenes*	Pos.	PD
2010	Dairy products	3+	W7	Cow cheese (Reblochon)	*sp*	3,5	*L. monocytogenes*	Pos.	33	0,01	-	*L. monocytogenes*	Pos.	ND FN_{alt}
2010	Dairy products	3+	Y1	Cow cheese	*sp*	3,7	*L. monocytogenes*	Pos.	10 481	3,14	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	T12	Cow cheese (Camembert)	*sp*	5,0	/	Abs.	189	0,06	+	*L. monocytogenes*	Pos.	PD
2010	Dairy products	3+	W5	Cow cheese	*sp*	6,6	/	Abs.	7 941	2,56	+	*L. monocytogenes*	Pos.	PD
2010	Dairy products	3+	X8	Goat cheese	*sp*	7,0	*L. monocytogenes*	Pos.	10 659	3,44	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	Y5	Cow cheese	*sp*	7,4	*L. monocytogenes*	Pos.	2 085	0,62	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	X2	Cow cheese	*sp*	8,0	*L. monocytogenes*	Pos.	10 365	3,34	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	W2	Cow cheese (Raclette) with raw milk	*sp*	8,8	*L. monocytogenes*	Pos.	3 056	0,91	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	R5	Cow cheese (Morbier)	*sp*	9,0	*L. monocytogenes*	Pos.	10 484	3,38	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	X7	Goat cheese	*sp*	13,2	*L. monocytogenes*	Pos.	10 237	3,30	+	*L. monocytogenes*	Pos.	PA
2017	Dairy products	3+	17	Neuf châtel with raw milk	*se*	*2,4*	*L. monocytogenes*	Pos.	10 454	2,66	+	*L. monocytogenes*	Pos.	PA
2017	Dairy products	3+	19	Camembert with raw milk	*se*	*2,4*	*L. monocytogenes*	Pos.	10 481	2,66	+	*L. monocytogenes*	Pos.	PA
2017	Dairy products	3+	21	Coulommiers with raw milk	*se*	*2,4*	*L. monocytogenes*	Pos.	10 672	2,71	+	*L. monocytogenes*	Pos.	PA
2017	Dairy products	3+	23	St Nectaire with raw milk	*se*	*2,4*	*L. monocytogenes*	Pos.	10 578	2,86	+	*L. monocytogenes*	Pos.	PA

Dairy products : storage for 72 hours at 2-8°C

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Dairy products	1+	N1	Cow cheese (Rollot of Picardy)	*sp*	3,4	*L. monocytogenes*	Pos.	181	0,05	+	*L. monocytogenes* *Isol. LX: L. monocytogenes*	Pos.	PA
2009	Dairy products	1+	AI1	Cow cheese (Cantal)	*sp*	5,2	*L.monocytogenes*	Pos.						
2009	Dairy products	1+	AH16	Cow cheese (Maroilles)	*sp*	6,1	*L.monocytogenes*	Pos.						
2009	Dairy products	1+	N2	Cow cheese (Epoisses)	*sp*	6,8	*L. monocytogenes*	Pos.	11 754	3,64	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	1+	AH15	Cow cheese (Trou du cru)	*sp*	6,8	*L.monocytogenes*	Pos.						
2009	Dairy products	1+	O8	Cow cheese (Chaource)	*sp*	9,6	*L. monocytogenes*	Pos.	9 765	3,02	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	1+	AI8	Cow cheese (Munster)	*sp*	10,4	*L.monocytogenes*	Pos.						
2009	Dairy products	1+	N4	Raw milk	*sp*	5,1	*L. monocytogenes*	Pos.	10 153	3,14	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	1+	Q15	Raw milk	*sp*	6,0	*L. monocytogenes*	Pos.	3	0	-	/	Neg.	ND
2009	Dairy products	1+	Q16	Raw milk	*sp*	7,5	*L. monocytogenes*	Pos.	9571	3,33	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	1+	AG9	Raw milk	*sp*	7,8	*L.monocytogenes*	Pos.						
2009	Dairy products	1+	N3	Raw milk	*sp*	8,5	*L. monocytogenes*	Pos.	9 975	3,08	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	2+	AF2	Goat cheese	*sp*	1,4	*L.monocytogenes*	Pos.						
2009	Dairy products	2+	AF10	Goat cheese	*sp*	2,6	*L.monocytogenes*	Pos.						
2009	Dairy products	2+	AH14	Goat cheese	*sp*	4,6	*L.monocytogenes*	Pos.						
2009	Dairy products	2+	O7	Goat cheese	*sp*	4,8	*L. monocytogenes*	Pos.	10 018	3,10	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	2+	AG2	Blue cheese	*sp*	5,2	*L.monocytogenes*	Pos.						
2009	Dairy products	2+	AF7	Goat cheese	*sp*	6,3	*L.monocytogenes*	Pos.						
2009	Dairy products	2+	AI4	Bleu de Bresse	*sp*	6,4	*L.monocytogenes*	Pos.						
2009	Dairy products	2+	O5	Goat cheese	*sp*	7,2	*L. monocytogenes*	Pos.	11 462	3,54	+	*L. monocytogenes*	Pos.	PA
2009	Dairy products	2+	AG5	Blue cheese (bleu de Bresse)	*sp*	10,4	*L.monocytogenes*	Pos.						
2017	Dairy products	2+	15	Pasteurized sheep cheese	*se*	*2,4*	*L. monocytogenes*	Pos.	11 056	2,81	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	V2	Cow Organic Cheese (St Félicien)	*No*	/	*L. monocytogenes*	Pos.	80	0,02	-	*L. monocytogenes*	Neg.	ND FN_{alt}
2010	Dairy products	3+	X6	Raw milk cow cheese	*No*	/	*L. monocytogenes*	Pos.	10 498	2,90	+	*L.monocytogenes*	Pos.	PA
2010	Dairy products	3+	T11	Raw milk cow cheese	*No*	/	*L. monocytogenes*	Pos.	10 648	2,94	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	U3	Raw milk cow cheese	*No*	/	*L. monocytogenes*	Pos.	10 292	2,84	+	*L.monocytogenes*	Pos.	PA
2010	Dairy products	3+	X1	Raw milk cow cheese	*No*	/	*L. monocytogenes*	Pos.	10 400	2,87	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	X5	Raw milk cow cheese	*No*	/	*L.monocytogenes* *L. innocua*	Pos.	10 395	2,87	+	*L.monocytogenes* *L. innocua*	Pos.	PA
2010	Dairy products	3+	R1	Cow cheese (Reblochon)	*No*	/	*L. monocytogenes*	Pos.	11 224	3,10	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	R10	Ewe cheese parsley	*No*	/	*L. monocytogenes*	Pos.	11 506	3,18	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	W3	Ewe cheese parsley	*No*	/	*L. monocytogenes*	Pos.	3 456	0,97	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	U8	Cow cheese	*sp*	0,0	/	Neg.	11 861	3,34	+	*L. monocytogenes*	Pos.	PD
2010	Dairy products	3+	R4	Cow cheese (Mont dor)	*sp*	0,1	*L. monocytogenes*	Pos.	7	0,00	-	/	Neg.	ND
2010	Dairy products	3+	U7	Cow cheese	*sp*	0,1	*L.monocytogenes* *L. innocua*	Pos.	11 235	3,17	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	R2	Cow cheese (Raclette)	*sp*	1,4	*L. monocytogenes*	Pos.	440	0,14	+	*L. monocytogenes*	Pos.	PA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2010	Dairy products	3+	X3	Goat cheese (Sainte Maure)	*sp*	2,1	*L. monocytogenes*	Pos.	2 919	0,94	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	X4	Cow cheese (Brie de Meaux)	*sp*	3,2	*L. monocytogenes*	Pos.	1 148	0,33	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	Y2	Cow cheese (Saint Nectaire)	*sp*	3,2	/	Neg.	6 225	1,75	+	*L. monocytogenes*	Pos.	PD
2010	Dairy products	3+	W7	Cow cheese (Reblochon)	*sp*	3,5	*L. monocytogenes*	Pos.	38	0,01	-	*L. monocytogenes*	Pos.	ND FN_{alt}
2010	Dairy products	3+	Y1	Cow cheese	*sp*	3,7	*L. monocytogenes*	Pos.	11 317	3,28	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	T12	Cow cheese (Camembert)	*sp*	5,0	/	Neg.	129	0,03	-	*L. monocytogenes*	Neg.	PA
2010	Dairy products	3+	W5	Cow cheese	*sp*	6,6	/	Neg.	8 900	2,87	+	*L. monocytogenes*	Pos.	PD
2010	Dairy products	3+	X8	Goat cheese	*sp*	7,0	*L. monocytogenes*	Pos.	11 538	3,35	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	Y5	Cow cheese	*sp*	7,4	*L. monocytogenes*	Pos.	2 151	0,62	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	X2	Cow cheese	*sp*	8,0	*L. monocytogenes*	Pos.	11 207	3,25	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	W2	Cow cheese (Raclette) with raw milk	*sp*	8,8	*L. monocytogenes*	Pos.	2 948	0,85	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	R5	Cow cheese (Morbier)	*sp*	9,0	*L. monocytogenes*	Pos.	11 357	3,29	+	*L. monocytogenes*	Pos.	PA
2010	Dairy products	3+	X7	Goat cheese	*sp*	13,2	*L. monocytogenes*	Pos.	10 874	3,51	+	*L. monocytogenes*	Pos.	PA
2017	Dairy products	3+	17	Neuf châtel with raw milk	*se*	*2,4*	*L. monocytogenes*	Pos.	10 146	2,58	+	*L. monocytogenes*	Pos.	PA
2017	Dairy products	3+	19	Camembert with raw milk	*se*	*2,4*	*L. monocytogenes*	Pos.	10 134	2,57	+	*L. monocytogenes*	Pos.	PA
2017	Dairy products	3+	21	Coulommiers with raw milk	*se*	*2,4*	*L. monocytogenes*	Pos.	10 654	2,71	+	*L. monocytogenes*	Pos.	PA
2017	Dairy products	3+	23	St Nectaire with raw milk	*se*	*2,4*	*L. monocytogenes*	Pos.	10 778	2,81	+	*L. monocytogenes*	Pos.	PA

Seafood products

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
					Type	Level	CONFIRMATION	Final result	Detection			Confirmation	Final result	
							Identification		RFV	VT	Test result	*Identification*		
2009	Seafood products	1-	D9	shrimps	*No*	/	/	Neg.	2	0,00	-	/	Neg.	NA
2009	Seafood products	1-	H14	shrimps	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Seafood products	1-	E4	Seafood	*No*	/	/	Neg.	32	0,01	-	/	Neg.	NA
2017	Seafood products	1-	20	Salmon fillet	/	/	/	Neg.	-2	0,00	-	/	Neg.	NA
2017	Seafood products	1-	22	Hake fillet	/	/	/	Neg.	3	0,00	-	/	Neg.	NA
2017	Seafood products	1-	24	Tuna fillet	/	/	/	Neg.	1	0,00	-	/	Neg.	NA
2017	Seafood products	1-	26	Cod fillet	/	/	/	Neg.	1	0,00	-	/	Neg.	NA
2017	Seafood products	1-	28	Trout fillet	/	/	/	Neg.	2	0,00	-	/	Neg.	NA
2017	Seafood products	1-	30	Haddock fillet	/	/	/	Neg.	3	0,00	-	/	Neg.	NA
2017	Seafood products	1-	32	Monlfish fillet	/	/	/	Neg.	0	0,00	-	/	Neg.	NA
2009	Seafood products	2-	E2	Pieces of smoked salmon	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Seafood products	2-	E14	Smoked Atlantic Salmon	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Seafood products	2-	E16	Pieces of smoked salmon	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Seafood products	2-	E17	Smoked Atlantic Salmon	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Seafood products	2-	F3	Pieces of smoked salmon	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Seafood products	2-	F14	smoked haddock	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Seafood products	2-	G5	Smoked salmon Scotland	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Seafood products	2-	G6	Smoked trout	*No*	/	/	Neg.	8	0,00	-	/	Neg.	NA
2009	Seafood products	2-	G8	Mini slices of smoked salmon	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Seafood products	2-	G12	Smoked Halibut	*No*	/	/	Neg.	7	0,00	-	/	Neg.	NA
2009	Seafood products	2-	I6	Trout smoked calvados-basil	*No*	/	*L. innocua*	Neg.	6	0,00	-	/	Neg.	NA
2009	Seafood products	2-	I7	Trout smoked in beech wood	*No*	/	*L. innocua*	Neg.	5	0,00	-	/	Neg.	NA
2009	Seafood products	2-	J6	Pickled smoked herring	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Seafood products	2-	J8	Smoked salmon Norway	*No*	/	/	Neg.	2	0,00	-	/	Neg.	NA
2009	Seafood products	2-	J9	Pieces of smoked salmon	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Seafood products	2-	J10	Smoked salmon Norway	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Seafood products	2-	L13	Smoked Salmon Atlantic	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Seafood products	2-	L14	Tartar Smoked salmon	*No*	/	*L. innocua*	Neg.	3	0,00	-	/	Neg.	NA
2009	Seafood products	2-	L15	Herring fillets	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Seafood products	2-	L16	Smoked salmon Norway	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Seafood products	3-	F10	Fish Paupiettes	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Seafood products	3-	C6	Frozen cooked mussels	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Seafood products	3-	E6	Basket of Scallops	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Seafood products	3-	F1	Salmon Paupiettes	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Seafood products	3-	F2	Salmon Paupiettes	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Seafood products	3-	F15	Salad Crab	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Seafood products	3-	F16	Salad Crab	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2017	Seafood products	3-	34	Tarama with cod eggs	/	/	/	Neg.	-2	0,00	-	/	Neg.	NA
2017	Seafood products	3-	36	Surimi	/	/	/	Neg.	1	0,00	-	/	Neg.	NA
2017	Seafood products	3-	52	Salmon rillette	/	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Seafood products	1+	A7	Fish trio	*No*	/	*L. monocytogenes*	Pos.	2	0,00	-	/	Neg.	ND
2009	Seafood products	1+	A17	Pangasus fillets	*No*	/	*L. monocytogenes*	Pos.	10 421	3,33	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	B9	Fish Duo	*No*	/	*L. monocytogenes*	Pos.	10 009	3,19	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	B10	Seafood	*No*	/	*L. monocytogenes*	Pos.	10 533	3,36	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	C1	shrimps	*No*	/	*L. monocytogenes*	Pos.	614	0,19	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	C12	shrimps	*No*	/	*L. monocytogenes*	Pos.	5 011	1,60	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	G9	Saithe fillet	*No*	/	*L. monocytogenes*	Pos.	11 467	3,58	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H8	Pangasus fillets	*No*	/	*L. monocytogenes*	Pos.	10 135	3,13	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H9	Pangasus fillets	*No*	/	*L. monocytogenes*	Pos.	10 193	3,14	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H10	Fillets of whiting	*No*	/	*L. monocytogenes L. innocua*	Pos.	10 313	3,18	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H11	shrimps	*No*	/	*L. monocytogenes L. innocua*	Pos.	10 605	3,27	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H12	shrimps	*No*	/	*L. monocytogenes L. innocua*	Pos.	10 536	3,25	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H13	shrimps	*No*	/	*L. monocytogenes L. innocua*	Pos.	9 746	3,00	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	2+	J7	Smoked eels	*No*	/	*L. monocytogenes*	Pos.	7	0,00	-	/	Neg.	ND
2009	Seafood products	2+	A19	Mini slices of smoked trout	*No*	/	*L. monocytogenes*	Pos.	10 643	3,40	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	2+	G11	Smoked Salmon Atlantic	*No*	/	*L. monocytogenes*	Pos.	11 143	3,48	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	2+	I5	Smoked Atlantic Salmon	*No*	/	*L. monocytogenes*	Pos.	11 440	3,53	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	2+	I8	Smoked Salmon Atlantic	*No*	/	*L. monocytogenes*	Pos.	6 738	2,08	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	2+	AB2	Organic SmokedSalmon	*No*	/	*L.monocytogenes*	Pos.	10 385	2,59	+	*L.monocytogenes*	Pos.	PA
2009	Seafood products	2+	AB6	kippers	*No*	/	*L.monocytogenes L.innocua*	Pos.	10 217	2,55	+	*L.monocytogenes L.innocua*	Pos.	PA
2009	Seafood products	2+	AF21	Smoked salmon	*No*	/	*L.monocytogenes*	Pos.	9 787	2,60	+	*L.monocytogenes*	Pos.	PA
2017	Seafood products	2+	23	Smoked salmon	*se*	*2,2*	*L. monocytogenes*	Pos.	10 539	2,68	+	*L.monocytogenes*	Pos.	PA
2017	Seafood products	2+	25	Smoked trout	*se*	*2,2*	*L. monocytogenes*	Pos.	10 629	2,70	+	*L.monocytogenes*	Pos.	PA
2009	Seafood products	3+	F8	Smoked salmon roll and celery	*No*	/	*L. monocytogenes*	Pos.	11 136	3,48	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	3+	E15	Breaded fish	*No*	/	*L. monocytogenes*	Pos.	11 306	3,53	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	3+	G4	Fish marinated in basil	*No*	/	*L. monocytogenes*	Pos.	494	0,15	+	*L. monocytogenes*	Pos.	PA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method						Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result		
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*			
2009	Seafood products	3+	H6	Cuttlefish rust	*No*	/	*L. monocytogenes L. innocua*	Pos.	10 122	3,12	+	*L. monocytogenes*	Pos.		PA
2009	Seafood products	3+	H7	Cuttlefish rust	*No*	/	*L. monocytogenes L. innocua*	Pos.	10 038	3,10	+	*L. monocytogenes*	Pos.		PA
2017	Seafood products	3+	27	Tarama with cod eggs	*se*	*2,2*	*L. monocytogenes*	Pos.	7 888	2,00	+	*L.monocytogenes*	Pos.		PA
2017	Seafood products	3+	29	Surimi	*se*	*2,2*	*L. monocytogenes*	Pos.	10 605	2,69	+	*L.monocytogenes*	Pos.		PA
2017	Seafood products	3+	31	Atum rillette	*se*	*1,8*	*L. monocytogenes*	Pos.	3 051	0,77	+	*L.monocytogenes*	Pos.		PA
2017	Seafood products	3+	33	Salmon rillette	*se*	*1,8*	*L. monocytogenes*	Pos.	10 516	2,67	+	*L.monocytogenes*	Pos.		PA
2017	Seafood products	3+	35	Sardine rillette	*se*	*1,8*	*L. monocytogenes*	Pos.	10 658	2,71	+	*L.monocytogenes*	Pos.		PA

Seafood products : storage for 72 hours at 2-8°C

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
					Type	Level	CONFIRMATION	Final result	Detection			Confirmation	Final result	
							Identification		RFV	VT	Test result	*Identification*		
2009	Seafood products	1+	A7	Fish trio	*No*	/	*L. monocytogenes*	+	4	0,00	-	/	Neg.	ND
2009	Seafood products	1+	A17	Pangasus fillets	*No*	/	*L. monocytogenes*	+	10 356	3,31	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	B9	Fish Duo	*No*	/	*L. monocytogenes*	+	9 976	3,18	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	B10	Seafood	*No*	/	*L. monocytogenes*	+	11 577	3,70	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	C1	shrimps	*No*	/	*L. monocytogenes*	+	10 874	3,47	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	C12	shrimps	*No*	/	*L. monocytogenes*	+	99	0,03	-		Neg.	ND
2009	Seafood products	1+	G9	Saithe fillet	*No*	/	*L. monocytogenes*	+	11 988	3,93	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H8	Pangasus fillets	*No*	/	*L. monocytogenes*	+	10 518	3,24	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H9	Pangasus fillets	*No*	/	*L. monocytogenes*	+	10 644	3,28	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H10	Fillets of whiting	*No*	/	*L. monocytogenes L. innocua*	+	10 603	3,27	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H11	shrimps	*No*	/	*L. monocytogenes L. innocua*	+	11 702	3,61	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H12	shrimps	*No*	/	*L. monocytogenes L. innocua*	+	9 103	2,81	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	1+	H13	shrimps	*No*	/	*L. monocytogenes L. innocua*	+	9 264	2,86	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	2+	J7	Smoked eels	*No*	/	*L. monocytogenes*	+	5	0,00	-	/	Neg.	ND
2009	Seafood products	2+	A19	Mini slices of smoked trout	*No*	/	*L. monocytogenes*	+	10 509	3,35	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	2+	G11	Smoked Salmon Atlantic	*No*	/	*L. monocytogenes*	+	11 365	3,73	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	2+	I5	Smoked Atlantic Salmon	*No*	/	*L. monocytogenes*	+	11 411	3,52	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	2+	I8	Smoked Salmon Atlantic	*No*	/	*L. monocytogenes*	+	11 623	3,58	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	2+	AB2	Organic Smoked Salmon	*No*	/	*L.monocytogenes*	+						
2009	Seafood products	2+	AB6	kippers	*No*	/	*L.monocytogenes L.innocua*	+						
2009	Seafood products	2+	AF21	Smoked salmon	*No*	/	*L.monocytogenes*	+						
2017	Seafood products	2+	23	Smoked salmon	*se*	*2,2*	*L. monocytogenes*	+	10 338	2,63	+	*L. monocytogenes*	Pos.	PA
2017	Seafood products	2+	25	Smoked trout	*se*	*2,2*	*L. monocytogenes*	+	10 276	2,61	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	3+	F8	Smoked salmon roll and celery	*No*	/	*L. monocytogenes*	+	10 295	3,21	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	3+	E15	Breaded fish	*No*	/	*L. monocytogenes*	+	10 202	3,19	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	3+	G4	Fish marinated in basil	*No*	/	*L. monocytogenes*	+	4 785	1,57	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	3+	H6	Cuttlefish rust	*No*	/	*L. monocytogenes L. innocua*	+	10 903	3,36	+	*L. monocytogenes*	Pos.	PA
2009	Seafood products	3+	H7	Cuttlefish rust	*No*	/	*L. monocytogenes L. innocua*	+	10 368	3,20	+	*L. monocytogenes*	Pos.	PA
2017	Seafood products	3+	27	Tarama with cod eggs	*se*	*2,2*	*L. monocytogenes*	+	10 138	2,57	+	*L. monocytogenes*	Pos.	PA
2017	Seafood products	3+	29	Surimi	*se*	*2,2*	*L. monocytogenes*	+	8 218	2,09	+	*L. monocytogenes*	Pos.	PA
2017	Seafood products	3+	31	Atum rillette	*se*	*1,8*	*L. monocytogenes*	+	10 333	2,62	+	*L. monocytogenes*	Pos.	PA
2017	Seafood products	3+	33	Salmon rillette	*se*	*1,8*	*L. monocytogenes*	+	10 558	2,68	+	*L. monocytogenes*	Pos.	PA
2017	Seafood products	3+	35	Sardine rillette	*se*	*1,8*	*L. monocytogenes*	+	10 715	2,72	+	*L. monocytogenes*	Pos.	PA

Vegetal products

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Vegetal products	1-	E1	Potatoes	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	I10	Frozen spinach branch	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	J12	Frozen Broccoli	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	K8	Frozen peas	*No*	/	*L. innocua*	Neg.	8	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	O14	Potatoes	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	G13	leeks	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	J13	Fresh green beans	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	K3	Vacuum raw courgettes	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	M3	Green beans	*sp*	*0,3*	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	I1	courgettes	*sp*	*1,7*	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	J14	Frozen sliced onions	*sp*	*3,4*	/	Neg.	7	0,00	-	/	Neg.	NA
2009	Vegetal products	1-	J18	Carrots, uncooked	*sp*	*20,4*	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	A3	Browned potatoes	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	E13	Frozen fries	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	F18	Frozen fries	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	J11	Browned frozen potatoes	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	K4	Frozen fries	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	K10	Frozen fries	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	B15	Grated carrots	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	L8	Mixed salad	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	M2	maches	*sp*	*0,6*	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	M1	Mixed salad	*sp*	*0,7*	/	Neg.	11	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	I4	Carrots	*sp*	*1,7*	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	L4	Grated carrots	*sp*	*4,9*	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Vegetal products	2-	J16	Carrots	*sp*	*27,2*	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	F11	Rice and vegetables from the sun	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	F17	Vegetable gardener	*No*	/	/	Neg.	11	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	A5	Rice 3 Colors and Veggie Mash	*No*	/	*L. innocua*	Neg.	3	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	B4	Chickpea Salad	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	E7	Grated carrots	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	E8	Red beets	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	L6	Pates 2 colors	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	L7	Wild Rice and Sun Vegetables	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	M4	Red cabbage vinaigrette	*sp*	*0,4*	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	I3	Carrot puree	*sp*	*2,1*	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	3-	I2	Vegetable gardener	*sp*	*2,5*	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Vegetal products	1+	K9	Frozen chopped spinach	*No*	/	*L. monocytogenes* *L. innocua*	Pos.	10 502	3,24	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	1+	O16	Frozen chopped spinach	*No*	/	*L. monocytogenes* *L. innocua*	Pos.	11 725	3,63	+	*L. monocytogenes*	Pos.	PA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Vegetal products	1+	M5	Raw cutted carrots	*No*	/	/	Neg.	6 425	1,98	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	1+	J15	Mix 3 peppers under vacuum	*sp*	4,3	/	Neg.	10 873	3,35	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	1+	J19	Fresh green beans under vacuum	*sp*	6,8	*L. monocytogenes*	Pos.	10 958	3,38	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	1+	J17	Raw courgettes under vacuum	*sp*	13,6	*L. monocytogenes*	Pos.	9 150	2,82	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	1+	39	Banana	*se*	2,2	*L. monocytogenes*	Pos.	10 660	2,71	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	1+	41	Grape	*se*	2,2	*L. monocytogenes*	Pos.	10 715	2,72	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	1+	43	Tomato	*se*	2,2	*L. monocytogenes*	Pos.	10 832	2,75	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	1+	45	Plums red	*se*	2,2	*L. monocytogenes*	Pos.	10 699	2,72	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	D1	Frozen fries	*No*	/	*L. grayi*	Neg.	10 207	3,26	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	2+	I9	Frozen fries	*No*	/	/	Neg.	10 922	3,37	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	2+	K5	Traditional Frozen fries	*No*	/	/	Neg.	1 034	0,31	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	2+	O15	Frozen fries	*No*	/	*L. seeligeri*	Neg.	10 858	3,36	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	2+	A1	Frozen fries	*No*	/	*L. monocytogenes*	Pos.	10 848	3,46	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	A2	Frozen traditional fries	*No*	/	*L. monocytogenes*	Pos.	1 397	0,44	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	C18	Frozen fries	*No*	/	*L. monocytogenes*	Pos.	10 933	3,49	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	O2	Spring vegetable poppy	*sp*	4,8	*L. monocytogenes*	Pos.	9 965	3,08	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	O4	Salad (Oak leaves)	*sp*	8,0	*L. monocytogenes*	Pos.	10 483	3,24	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	O3	Iceberg lettuce	*sp*	9,6	*L. monocytogenes*	Pos.	10 188	3,15	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	N6	Mixture raw vegetables	*sp*	13,2	*L. monocytogenes*	Pos.	11 860	3,67	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	A6	Saffron Rice and Vegetables	*No*	/	*L. monocytogenes*	Pos.	4	0,00	-	/	Neg.	ND
2009	Vegetal products	3+	L3	Green Beans with Garlic	*sp*	1,9	*L. monocytogenes*	Pos.	11 852	3,70	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	L2	Couscous vegetables	*sp*	3,9	*L. monocytogenes*	Pos.	11 459	3,57	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	J20	Carrots and cabbage	*sp*	5,1	*L. monocytogenes*	Pos.	11 353	3,56	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	O1	Carrots + celery	*sp*	6,4	*L. monocytogenes*	Pos.	11 214	3,47	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	N5	Cucumber vinaigrette	*sp*	8,8	*L. monocytogenes*	Pos.	2 381	0,73	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	J21	Cucumber vinaigrette	*sp*	17,0	/	Neg.	787	0,24	+	*L. monocytogenes*	Pos.	PD
2017	Vegetal products	3+	47	Mixed vegetables	*se*	2.4	*L. monocytogenes*	Pos.	10 749	2,73	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	3+	49	Peas	*se*	2.4	*L. monocytogenes*	Pos.	10 532	2,67	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	3+	51	White beans	*se*	2.4	*L. monocytogenes*	Pos.	10 578	2,69	+	*L. monocytogenes*	Pos.	PA

Vegetal products : storage for 72 hours at 2-8°C

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Vegetal products	1+	K9	Frozen chopped spinach	*No*	/	*L. monocytogenes L. innocua*	Pos.	9 858	3,07	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	1+	O16	Frozen chopped spinach	*No*	/	*L. monocytogenes L. innocua*	Pos.	11 190	3,46	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	1+	M5	Raw cutted carrots	*No*	/	/	Neg.	10 080	3,12	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	1+	J15	Mix 3 peppers under vacuum	*sp*	4,3	/	Neg.	10 402	3,21	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	1+	J19	Fresh green beans under vacuum	*sp*	6,8	*L. monocytogenes*	Pos.	10 251	3,16	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	1+	J17	Raw courgettes under vacuum	*sp*	13,6	*L. monocytogenes*	Pos.	10 773	3,32	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	1+	39	Banana	*se*	2,2	*L. monocytogenes*	Pos.	9 594	2,44	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	1+	41	Grape	*se*	2,2	*L. monocytogenes*	Pos.	10 144	2,58	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	1+	43	Tomato	*se*	2,2	*L. monocytogenes*	Pos.	10 638	2,70	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	1+	45	Plums red	*se*	2,2	*L. monocytogenes*	Pos.	10 159	2,58	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	D1	Frozen fries	*No*	/	*L. grayi*	Neg.	10 482	3,27	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	2+	I9	Frozen fries	*No*	/	/	Neg.	8 866	2,73	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	2+	K5	Traditional Frozen fries	*No*	/	/	Neg.	10 787	3,36	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	2+	O15	Frozen fries	*No*	/	*L. seeligeri*	Neg.	9 794	3,03	+	*L. monocytogenes*	Pos.	PD
2009	Vegetal products	2+	A1	Frozen fries	*No*	/	*L. monocytogenes*	Pos.	10 178	3,25	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	A2	Frozen traditional fries	*No*	/	*L. monocytogenes*	Pos.	11 703	3,74	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	C18	Frozen fries	*No*	/	*L. monocytogenes*	Pos.	11 213	3,58	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	O2	Spring vegetable poppy	*sp*	4,8	*L. monocytogenes*	Pos.	10291	3,18	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	O4	Salad (Oak leaves)	*sp*	8,0	*L. monocytogenes*	Pos.	10685	3,3	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	O3	Iceberg lettuce	*sp*	9,6	*L. monocytogenes*	Pos.	10612	3,28	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	2+	N6	Mixture raw vegetables	*sp*	13,2	*L. monocytogenes*	Pos.	10 125	3,13	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	A6	Saffron Rice and Vegetables	*No*	/	*L. monocytogenes*	Pos.	4	0,00	-	/	Neg.	ND
2009	Vegetal products	3+	L3	Green Beans with Garlic	*sp*	1,9	*L. monocytogenes*	Pos.	10 169	3,17	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	L2	Couscous vegetables	*sp*	3,9	*L. monocytogenes*	Pos.	10 016	3,12	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	J20	Carrots and cabbage	*sp*	5,1	*L. monocytogenes*	Pos.	10 281	3,17	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	O1	Carrots + celery	*sp*	6,4	*L. monocytogenes*	Pos.	10526	3,25	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	N5	Cucumber vinaigrette	*sp*	8,8	*L. monocytogenes*	Pos.	10099	3,12	+	*L. monocytogenes*	Pos.	PA
2009	Vegetal products	3+	J21	Cucumber vinaigrette	*sp*	17,0	/	Neg.	10 010	3,09	+	*L. monocytogenes*	Pos.	PD
2017	Vegetal products	3+	47	Mixed vegetables	*se*	2.4	*L. monocytogenes*	Pos.	10 650	2,70	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	3+	49	Peas	*se*	2.4	*L. monocytogenes*	Pos.	10 601	2,69	+	*L. monocytogenes*	Pos.	PA
2017	Vegetal products	3+	51	White beans	*se*	2.4	*L. monocytogenes*	Pos.	10 619	2,70	+	*L. monocytogenes*	Pos.	PA

Composite foods

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
					Type	Level	CONFIRMATION	Final result	Detection			Confirmation	Final result	
							Identification		RFV	VT	Test result	*Identification*		
2009	Composite food	1-	A12	Chicken tabouleh	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Composite food	1-	D7	Sandwich kebab	*No*	/	/	Neg.	9	0,00	-	/	Neg.	NA
2009	Composite food	1-	D8	Provençal chicken sandwich	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Composite food	1-	E3	Spicy pita salad	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Composite food	1-	G3	Smoked salmon, salad, mozarella	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Composite food	1-	G2	Shrimp Pasta Salad	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2017	Composite food	1-	VC 6	Pig snout with vinaigrette	*se*	*3.6*	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	1-	VC 37	Sandwich with ham and butter	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	1-	VC 45	Mixed vegetables (macédoine)	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	1-	VC 46	Semolina salad with vegetables	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	1-	VC 40	Tuna rilette	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	1-	VC 43	Grated carots	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	1-	VC 38	Sandwich with Coppa and Emmental	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	1-	VC 47	Beef panini cheese flavored	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	1-	38	Taboulet with chicken	*No*	/	/	Neg.	0	0,00	-	/	Neg.	NA
2017	Composite food	1-	40	strabourgeoise salad	*No*	/	/	Neg.	0	0,00	-	/	Neg.	NA
2017	Composite food	1-	42	Pièmontaise with ham	*No*	/	/	Neg.	2	0,00	-	/	Neg.	NA
2017	Composite food	1-	44	Sandwich with salmon and chives	*No*	/	/	Neg.	0	0,00	-	/	Neg.	NA
2009	Composite food	2-	F6	Small Vegetables Stuffed	*No*	/	*L. innocua*	Neg.	4	0,00	-	/	Neg.	NA
2009	Composite food	2-	G10	Stuffed zucchini	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Composite food	2-	C21	Pizza goat bacon	*No*	/	*L. welshimeri*	Neg.	80	0,02	-	/	Neg.	NA
2009	Composite food	2-	C11	Smoked fish	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Composite food	2-	F12	Salmon pizza	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Composite food	2-	G7	Salmon pizza	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Composite food	2-	A9	Penne and its little vegetables	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Composite food	2-	C3	Penne tomato basil and broccoli	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Composite food	2-	F13	Pizza with Goat cheese	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2017	Composite food	2-	VC 30	Pie with spinash and goat cheese	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	2-	VC 36	Fusilli carbonara	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	2-	VC 44	Pie with tomatoes and goat cheese	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	2-	VC 3	Pizza: ham, cheese and mushrooms	*se*	*2.2*	/	Neg.	/	0.03	-	/	Neg.	NA
2017	Composite food	2-	VC 29	Cannelloni bolognese	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	2-	VC 63	Tortilla potatoes, eggs, bacon	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	2-	48	Pizza with ham and cheese	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Composite food	3-	B14	Pineapple cake	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Composite food	3-	C22	Merveilleux	*No*	/	/	Neg.	12	0,00	-	/	Neg.	NA
2009	Composite food	3-	Q3	Tropézienne pie	*No*	/	/	Neg.	7	0,00	-	/	Neg.	NA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
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					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Composite food	3-	Q4	Cup duo profiteroles	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Composite food	3-	Q5	Versaillais	*No*	/	/	Neg.	7	0,00	-	/	Neg.	NA
2009	Composite food	3-	AB4	Chocolate mousse cake	*No*	/	/	Neg.	0	0,00	-	/	Neg.	NA
2009	Composite food	3-	AB13	Strawberry tart	*No*	/	/	Neg.	1	0,00	-	/	Neg.	NA
2009	Composite food	3-	AE2	Tart with custard	*No*	/	/	Neg.	2	0,00	-	/	Neg.	NA
2009	Composite food	3-	AF27	Raspberry pie	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Composite food	3-	AF29	Chocolate cake	*No*	/	/	Neg.	9	0,00	-	/	Neg.	NA
2009	Composite food	3-	AG20	Saint Honoré	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2017	Composite food	3-	VC 31	Frut salad	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	3-	VC 32	Custard tart	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	3-	VC 33	Strawberry pie	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	3-	VC 34	Paris Brest	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	3-	VC 35	Bread with custard	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	3-	VC 41	Tresse provencale	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	3-	VC 42	Pancake	*No*	/	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	3-	VC 48	Eclair au café	*No*	/	/	Neg.	/	0,00	-	/	Neg.	NA
2017	Composite food	3-	VC 49	Cream doughnut	*se*	*1,2*	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	3-	VC 50	Patte d'ours	*se*	*1,2*	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	3-	VC 51	Apple pie 2	*se*	*1,2*	/	Neg.	/	0.00	-	/	Neg.	NA
2017	Composite food	3-	VC 56	Lemon tourt	*se*	*1.4*	/	Neg.	/	0.02	-	/	Neg.	NA
2017	Composite food	3-	VC 60	Vermicelli with beef, rice, vegetables	*se*	*1.4*	/	Neg.	/	0.00	-	/	Neg.	NA
2009	Composite food	1+	F7	Smoked salmon, soft cheese, dill	*No*	/	*L. welshimeri*	Neg.	10 287	3,21	+	*L. monocytogenes*	Pos.	PD
2009	Composite food	1+	A10	Shrimp Pasta Salad	*No*	/	*L. monocytogenes*	Pos.	942	0,30	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	VC 1	Salad with pasta, tuna and vegetables	*se*	*2.8*	/	Neg.	/	2.45	+	*L. monocytogenes*	Pos.	PD
2017	Composite food	1+	VC 27	Sandwich with meat, tomato	*se*	*2.6*	/	Neg.	/	0.16	+	*L. monocytogenes*	Pos.	PD
2017	Composite food	1+	VC 2	Sandwich with salmon	*se*	*2.8*	*L. monocytogenes*	Pos.	/	2.67	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	VC 7	Salad of semolina with vegetables and chicken	*se*	*3.6*	*L. monocytogenes*	Pos.	/	3.28	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	VC 20	Piemontoise salad	*se*	*2.4*	*L. monocytogenes*	Pos.	/	2.20	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	VC 21	Tabbouleh with chicken and chive	*se*	*1.6*	*L. monocytogenes*	Pos.	/	3.21	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	VC 23	Sandwich with emmental	*se*	*1.6*	*L. monocytogenes*	Pos.	/	3.23	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	VC 24	Sandwich with chicken and mayonnaise	*se*	*1.6*	*L. monocytogenes*	Pos.	/	3.19	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	VC 25	Sandwich with surimi, salad and cucumber	*se*	*2.6*	*L. monocytogenes*	Pos.	/	3.22	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	VC 26	Sandwich with tuna, raw vegetables and moyannaise	*se*	*2.6*	*L. monocytogenes*	Pos.	/	3.13	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	53	Taboulet with chicken	*se*	*2,2*	*L. monocytogenes*	Pos.	9 882	2,51	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	55	strabourgeoise salad	*se*	*2,2*	*L. monocytogenes*	Pos.	10 749	2,73	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	57	Pièmontaise with ham	*se*	*2,2*	*L. monocytogenes*	Pos.	10 542	2,68	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	59	Sandwich with salmon and chives	*se*	*2,6*	*L. monocytogenes*	Pos.	10 600	2,69	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	61	Sandwich with ham and Emmental	*se*	*2,6*	*L. monocytogenes*	Pos.	10 420	2,65	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	63	Sandwich with tuna and crudities	*se*	*2,6*	*L. monocytogenes*	Pos.	10 678	2,71	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	65	Sandwich with ham and butter	*se*	*2,6*	*L. monocytogenes*	Pos.	10 160	2,58	+	*L. monocytogenes*	Pos.	PA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
					Type	Level	CONFIRMATION	Final result	Detection			Confirmation	Final result	
							Identification		RFV	VT	Test result	*Identification*		
2017	Composite food	1+	67	Sandwich with rosette and butter	*se*	*2,6*	*L. monocytogenes*	Pos.	10 802	2,74	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	A20	Pizza Emmental Ham	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	1 036	0,33	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	B6	Chicken Paella	*No*	/	*L. monocytogenes*	Pos.	10 435	3,33	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	C14	Pizza Ham mushrooms	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	4 491	1,43	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	C15	Pizza ham cheese	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	6 285	2,00	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	D12	Pizza Ham mushrooms	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	7 950	2,54	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	H4	Pizza with 3 cheeses	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	5 176	1,59	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	J23	Pizza with Goat cheese	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	1 212	0,37	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	C13	Filet of hake, rice and vegetables	*No*	/	/	Neg.	408	0,13	+	*L. monocytogenes*	Pos.	PD
2009	Composite food	2+	A11	Paella seafood	*No*	/	*L. monocytogenes*	Pos.	10 036	3,20	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	A13	Crispy snail	*No*	/	*L. monocytogenes*	Pos.	10 407	3,32	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	B5	Chinese noodles and crunchy vegetables	*No*	/	*L. monocytogenes*	Pos.	2	0,00	-	/ *Isol Lx: L. monocytogenes*	Neg.	ND FN_{alt}
2009	Composite food	2+	D13	Goat cheese Pizza	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	1 481	0,47	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 5	Cooked pasta with cheese	*se*	*2.6*	/	Neg.	/	3.40	+	*L. monocytogenes*	Pos.	PD
2017	Composite food	2+	VC 28	Pizza	*se*	*2.6*	/	Neg.	/	0.05	+	*L. monocytogenes*	Pos.	PD
2017	Composite food	2+	VC 15	Galette of black corn	*se*	*2*	*L. monocytogenes*	Pos.	/	0.04	-	/	Neg.	ND
2017	Composite food	2+	VC 17	Vegetable gratin with pork	*se*	*2*	*L. monocytogenes*	Pos.	/	0.00	-	/	Neg.	ND
2017	Composite food	2+	VC 19	Chinese pasta with vegetables	*se*	*2.4*	*L. monocytogenes*	Pos.	/	0.00	-	/	Neg.	ND
2017	Composite food	2+	VC 8	Quiche lorraine	*se*	*3.6*	*L. monocytogenes*	Pos.	/	3.34	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 9	Pie with tuna, tomato and sweet pepper	*se*	*3.8*	*L. monocytogenes*	Pos.	/	3.31	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 10	Bœuf bourguignon	*se*	*3.8*	*L. monocytogenes*	Pos.	/	3.29	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 11	Croissant with ham	*se*	*8.0*	*L. monocytogenes*	Pos.	/	3.27	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 12	Couscous	*se*	*8.0*	*L. monocytogenes*	Pos.	/	0.10	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 16	Tortilla of bacon	*se*	*2*	*L. monocytogenes*	Pos.	/	3.44	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 18	Lasagna of chicken	*se*	*2.4*	*L. monocytogenes*	Pos.	/	3.42	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 22	Shepherd's pie	*se*	*1.6*	*L. monocytogenes*	Pos.	/	3.24	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 39	Spaghetti with bolognaise and parmesan cheese	*No*	/	*L. monocytogenes*	Pos.	/	2.98	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 53	Curry noodles salad	*se*	*0*	*L. monocytogenes*	Pos.	/	3.08	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	C24	Chou chantilly	*No*	/	*L. monocytogenes*	Pos.	10 138	3,24	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	H1	Cup duo profiteroles	*No*	/	*L. monocytogenes*	Pos.	10 685	3,29	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	H2	Stawberry duo cup	*No*	/	*L. monocytogenes*	Pos.	10 693	3,30	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	H3	Profiteroles chantilly	*No*	/	*L. monocytogenes*	Pos.	11 011	3,40	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	K1	Strawberry duo cup	*No*	/	*L. monocytogenes*	Pos.	9 717	3,00	+	*L. monocytogenes*	Pos.	PA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method						Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result		
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*			
2009	Composite food	3+	K2	Chou chantilly	*No*	/	*L. monocytogenes*	Pos.	9 771	3,01	+	*L. monocytogenes*	Pos.		PA
2009	Composite food	3+	M6	Chou chantilly	*No*	/	*L. monocytogenes*	Pos.	9 109	2,82	+	*L. monocytogenes* *Isol Lx: L. monocytogenes*	Pos.		PA
2017	Composite food	3+	VC 61	Hazelnut cake	se	1.8	/	Neg.	/	0.11	+	L. monocytogenes	Pos.		PD
2017	Composite food	3+	VC 4	Pie with peach and pear	se	1.4	L. monocytogenes	Pos.	/	3.00	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	VC 13	Chocolate cake	se	1.6	L. monocytogenes	Pos.	/	3.24	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	VC 14	Apple pie 1	se	1.6	L. monocytogenes	Pos.	/	3.01	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	VC 52	Strawberry pie	se	0	L. monocytogenes	Pos.	/	2.62	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	VC 54	Clafoutis	se	0	L. monocytogenes	Pos.	/	3.07	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	VC 55	Egg cream 1	se	1.4	L. monocytogenes	Pos.	/	2.85	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	VC 57	Custard	se	1.4	L. monocytogenes	Pos.	/	2.88	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	VC 58	Tiramisu	se	2.2	L. monocytogenes	Pos.	/	0.42	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	VC 59	Egg cream 2	se	2.2	L. monocytogenes	Pos.	/	1,40	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	VC 62	Chocolate and hazelnut cake	se	1.8	L. monocytogenes	Pos.	/	2.31	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	69	Raspberries tart	se	1,8	L. monocytogenes	Pos.	10872	2,76	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	71	Mille feuille	se	2,8	L. monocytogenes	Pos.	10793	2,74	+	L. monocytogenes	Pos.		PA
2017	Composite food	3+	73	Savarin with rhum and pastry cream	se	2,8	L. monocytogenes	Pos.	9238	2,35	+	L. monocytogenes	Pos.		PA

Composite foods : storage for 72 hours at 2-8°C

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Composite food	1+	F7	Smoked salmon, soft cheese, dill	*No*	/	*L. welshimeri*	Neg.	10 109	3,16	+	*L. monocytogenes*	Pos.	PD
2009	Composite food	1+	A10	Shrimp Pasta Salad	*No*	/	*L. monocytogenes*	Pos.	5 772	1,84	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	VC 1	Salad with pasta, tuna and vegetables	*se*	*2.8*	/	Neg.	/	2.61	+	+	Pos.	PD
2017	Composite food	1+	VC 27	Sandwich with meat, tomato	*se*	*2.6*	/	Neg.	/	0,14	+	+	Pos.	PD
2017	Composite food	1+	VC 2	Sandwich with salmon	*se*	*2.8*	*L. monocytogenes*	Pos.	/	3.31	+	+	Pos.	PA
2017	Composite food	1+	VC 7	Salad of semolina with vegetables and chicken	*se*	*3.6*	*L. monocytogenes*	Pos.	/	3.30	+	+	Pos.	PA
2017	Composite food	1+	VC 20	Piemontoise salad	*se*	*2.4*	*L. monocytogenes*	Pos.	/	2.22	+	+	Pos.	PA
2017	Composite food	1+	VC 21	Tabbouleh with chicken and chive	*se*	*1.6*	*L. monocytogenes*	Pos.	/	2.83	+	+	Pos.	PA
2017	Composite food	1+	VC 23	Sandwich with emmental	*se*	*1.6*	*L. monocytogenes*	Pos.	/	3.05	+	+	Pos.	PA
2017	Composite food	1+	VC 24	Sandwich with chicken and mayonnaise	*se*	*1.6*	*L. monocytogenes*	Pos.	/	3.05	+	+	Pos.	PA
2017	Composite food	1+	VC 25	Sandwich with surimi, salad and cucumber	*se*	*2.6*	*L. monocytogenes*	Pos.	/	2.43	+	+	Pos.	PA
2017	Composite food	1+	VC 26	Sandwich with tuna, raw vegetables and moyannaise	*se*	*2.6*	*L. monocytogenes*	Pos.	/	3.13	+	+	Pos.	PA
2017	Composite food	1+	53	Taboulet with chicken	*se*	*2,2*	*L. monocytogenes*	Pos.	10 718	2,72	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	55	strabourgeoise salad	*se*	*2,2*	*L. monocytogenes*	Pos.	9 565	2,43	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	57	Pièmontaise with ham	*se*	*2,2*	*L. monocytogenes*	Pos.	10 863	2,76	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	59	Sandwich with salmon and chives	*se*	*2,6*	*L. monocytogenes*	Pos.	10 958	2,78	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	61	Sandwich with ham and Emmental	*se*	*2,6*	*L. monocytogenes*	Pos.	10 924	2,77	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	63	Sandwich with tuna and crudities	*se*	*2,6*	*L. monocytogenes*	Pos.	11 028	2,80	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	65	Sandwich with ham and butter	*se*	*2,6*	*L. monocytogenes*	Pos.	10 778	2,74	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	1+	67	Sandwich with rosette and butter	*se*	*2,6*	*L. monocytogenes*	Pos.	10 672	2,71	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	A20	Pizza Emmental Ham	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	2 537	0,81	+	- *Isol Lx: L.monocytogenes*	Pos.	PA
2009	Composite food	2+	B6	Chicken Paella	*No*	/	*L. monocytogenes*	Pos.	11 918	3,81	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	C14	Pizza Ham mushrooms	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	8 568	2,73	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	C15	Pizza ham cheese	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	8 098	2,58	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	D12	Pizza Ham mushrooms	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	11 659	3,64	+	*L. monocytogenes*	Pos.	PA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
					Type	Level	CONFIRMATION	Final result	Detection			Confirmation	Final result	
							Identification		RFV	VT	Test result	*Identification*		
2009	Composite food	2+	H4	Pizza with 3 cheeses	*No*	/	*L. monocytogenes L. welshimeri*	Pos.	4070	1,25	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	J23	Pizza with Goat cheese	*No*	/	*L. monocytogenes L. welshimeri*	Pos.	1645	0,5	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	C13	Filet of hake, rice and vegetables	*No*	/	/	Neg.	6 143	1,96	+	*L. monocytogenes*	Pos.	PD
2009	Composite food	2+	A11	Paella seafood	*No*	/	*L. monocytogenes*	Pos.	10 248	3,27	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	A13	Crispy snail	*No*	/	*L. monocytogenes*	Pos.	9 638	3,08	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	2+	B5	Chinese noodles and crunchy vegetables	*No*	/	*L. monocytogenes*	Pos.	3	0,00	-	/	Neg.	ND
2009	Composite food	2+	D13	Goat cheese Pizza	*No*	/	*L. monocytogenes L. welshimeri*	Pos.	4 270	1,33	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	2+	VC 5	Cooked pasta with cheese	*se*	*2.6*	/	Neg.	/	3.31	+	+	Pos.	PD
2017	Composite food	2+	VC 28	Pizza	*se*	*2.6*	/	Neg.	/	0,04	-	+	Neg. (FN)	NA
2017	Composite food	2+	VC 15	Galette of black corn	*se*	*2*	*L. monocytogenes*	Pos.	/	0.00	-	-	Neg.	ND
2017	Composite food	2+	VC 17	Vegetable gratin with pork	*se*	*2*	*L. monocytogenes*	Pos.	/	0.01	-	-	Neg.	ND
2017	Composite food	2+	VC 19	Chinese pasta with vegetables	*se*	*2.4*	*L. monocytogenes*	Pos.	/	0.00	-	-	Neg.	ND
2017	Composite food	2+	VC 8	Quiche lorraine	*se*	*3.6*	*L. monocytogenes*	Pos.	/	3.35	+	+	Pos.	PA
2017	Composite food	2+	VC 9	Pie with tuna, tomato and sweet pepper	*se*	*3.8*	*L. monocytogenes*	Pos.	/	3.32	+	+	Pos.	PA
2017	Composite food	2+	VC 10	Bœuf bourguignon	*se*	*3.8*	*L. monocytogenes*	Pos.	/	3.35	+	+	Pos.	PA
2017	Composite food	2+	VC 11	Croissant with ham	*se*	*8.0*	*L. monocytogenes*	Pos.	/	3.23	+	+	Pos.	PA
2017	Composite food	2+	VC 12	Couscous	*se*	*8.0*	*L. monocytogenes*	Pos.	/	0,01	-	+	Neg. (FN)	ND
2017	Composite food	2+	VC 16	Tortilla of bacon	*se*	*2*	*L. monocytogenes*	Pos.	/	3.06	+	+	Pos.	PA
2017	Composite food	2+	VC 18	Lasagna of chicken	*se*	*2.4*	*L. monocytogenes*	Pos.	/	3.19	+	+	Pos.	PA
2017	Composite food	2+	VC 22	Shepherd's pie	*se*	*1.6*	*L. monocytogenes*	Pos.	/	3.15	+	+	Pos.	PA
2017	Composite food	2+	VC 39	Spaghetti with bolognaise and parmesan cheese	/	/	*L. monocytogenes*	Pos.	/	2,99	+	+	Pos.	PA
2017	Composite food	2+	VC 53	Curry noodles salad	*se*	*0*	*L. monocytogenes*	Pos.	/	2.59	+	+	Pos.	PA
2009	Composite food	3+	C24	Chou chantilly	*No*	/	*L. monocytogenes*	Pos.	10683	3,41	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	H1	Cup duo profiteroles	*No*	/	*L. monocytogenes*	Pos.	9896	3,05	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	H2	Stawberry duo cup	*No*	/	*L. monocytogenes*	Pos.	9982	3,08	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	H3	Profiteroles chantilly	*No*	/	*L. monocytogenes*	Pos.	10112	3,12	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	K1	Strawberry duo cup	*No*	/	*L. monocytogenes*	Pos.	10387	3,24	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	K2	Chou chantilly	*No*	/	*L. monocytogenes*	Pos.	10333	3,22	+	*L. monocytogenes*	Pos.	PA
2009	Composite food	3+	M6	Chou chantilly	*No*	/	*L. monocytogenes*	Pos.	9989	3,09	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	3+	VC 61	Hazelnut cake	se	1.8	/	Neg.	/	1.45	+	+	Pos.	PD
2017	Composite food	3+	VC 4	Pie with peach and pear	se	1.4	L. monocytogenes	Pos.	/	3.38	+	+	Pos.	PA
2017	Composite food	3+	VC 13	Chocolate cake	se	1.6	L. monocytogenes	Pos.	/	3.22	+	+	Pos.	PA
2017	Composite food	3+	VC 14	Apple pie 1	se	1.6	L. monocytogenes	Pos.	/	3.16	+	+	Pos.	PA
2017	Composite food	3+	VC 52	Strawberry pie	se	0	L. monocytogenes	Pos.	/	3.07	+	+	Pos.	PA
2017	Composite food	3+	VC 54	Clafoutis	se	0	L. monocytogenes	Pos.	/	3.06	+	+	Pos.	PA
2017	Composite food	3+	VC 55	Egg cream 1	se	1.4	L. monocytogenes	Pos.	/	2.94	+	+	Pos.	PA
2017	Composite food	3+	VC 57	Custard	se	1.4	L. monocytogenes	Pos.	/	3.01	+	+	Pos.	PA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
					Type	Level	CONFIRMATION	Final result	Detection			Confirmation	Final result	
							Identification		RFV	VT	Test result	*Identification*		
2017	Composite food	3+	VC 58	Tiramisu	se	2.2	L. monocytogenes	Pos.	/	2.08	+	+	Pos.	PA
2017	Composite food	3+	VC 59	Egg cream 2	se	2.2	L. monocytogenes	Pos.	/	2.51	+	+	Pos.	PA
2017	Composite food	3+	VC 62	Chocolate and hazelnut cake	se	1.8	L. monocytogenes	Pos.	/	3.02	+	+	Pos.	PA
2017	Composite food	3+	69	Raspberries tart	*se*	*1,8*	*L. monocytogenes*	Pos.	10704	2,72	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	3+	71	Mille feuille	*se*	*2,8*	*L. monocytogenes*	Pos.	10643	2,70	+	*L. monocytogenes*	Pos.	PA
2017	Composite food	3+	73	Savarin with rhum and pastry cream	*se*	*2,8*	*L. monocytogenes*	Pos.	10563	2,68	+	*L. monocytogenes*	Pos.	PA

Environmental samples

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
					Type	Level	CONFIRMATION	Final result	Detection			Confirmation	Final result	
							Identification		RFV	VT	Test result	*Identification*		
2009	Environmental samples	1-	B17	Residual water dirty tray	*No*	/	/	Neg.	35	0,01	-	/	Neg.	NA
2009	Environmental samples	1-	K7	Dirty stagnant dirty water	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Environmental samples	1-	M14	Water	*sp*	*1,2*	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Environmental samples	1-	AH1	Process water	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Environmental samples	1-	AH2	Washing water	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Environmental samples	1-	AH3	Frozen water	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Environmental samples	1-	AH4	Water rinsing vegetables	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Environmental samples	1-	AH5	Water rinsing vegetables	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Environmental samples	1-	AH6	Water rinsing booth fish	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Environmental samples	1-	AH8	Process water	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Environmental samples	2-	B12	PS White fish cutting table	*No*	/	/	Neg.	24	0,00	-	/	Neg.	NA
2009	Environmental samples	2-	E19	PS cutting board before washing	*No*	/	/	Neg.	18	0,00	-	/	Neg.	NA
2009	Environmental samples	2-	E20	PS table inox workshop	*No*	/	/	Neg.	19	0,00	-	/	Neg.	NA
2009	Environmental samples	2-	G18	PS cutting table	*No*	/	/	Neg.	19	0,00	-	/	Neg.	NA
2009	Environmental samples	2-	I11	PS Thread fish	*No*	/	*L. innocua*	Neg.	7	0,00	-	/	Neg.	NA
2009	Environmental samples	2-	I12	PS salmon tray	*No*	/	/	Neg.	31	0,00	-	/	Neg.	NA
2009	Environmental samples	2-	M11	PS slicer before washing	*No*	/	/	Neg.	14	0,00	-	/	Neg.	NA
2009	Environmental samples	2-	O13	PS gray bin before washing	*No*	/	/	Neg.	10	0,00	-	/	Neg.	NA
2009	Environmental samples	2-	Q10	PS inox table inox workshop preparation fishmonger	*No*	/	/	Neg.	8	0,00	-	/	Neg.	NA
2017	Environmental samples	2-	50	Surface sample 1	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	B13	Residues hachoir workshop butchery	*No*	/	/	Neg.	2	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	B18	Slicer residues	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	D3	Residues production line 1	*No*	/	/	Neg.	4	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	D4	Residues stand delicatessen	*No*	/	*L. innocua*	Neg.	3	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	D18	Residues stand	*No*	/	/	Neg.	8	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	E11	Residue threader	*No*	/	/	Neg.	5	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	E12	Sink waste	*No*	/	/	Neg.	3	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	G17	White fish workshop residues	*No*	/	/	Neg.	8	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	K6	Vegetable residues manufacturing line	*No*	/	/	Neg.	6	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	M9	Residues workshop fishmonger	*No*	/	/	Neg.	7	0,00	-	/	Neg.	NA
2009	Environmental samples	3-	Q7	Residues hachoir workshop butchery	*No*	/	/	Neg.	24	0,00	-	/	Neg.	NA
2009	Environmental samples	1+	O18	Water rinsing	*No*	/	*L. monocytogenes* *L. innocua*	Pos.	3	0,00	-	*L. innocua* *L. innocua*	Neg.	ND
2009	Environmental samples	1+	N14	Water rinsing vegetables	*No*	/	*L. monocytogenes*	Pos.	10 922	3,38	+	*L. monocytogenes* *L. monocytogenes*	Pos.	PA
2009	Environmental samples	1+	AH7	Water rinsing cup tray	*No*	/	*L.monocytogenes*	Pos.	10893	3,79	+	*L.monocytogenes*	Pos.	PA

Study	Category	Type	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
							CONFIRMATION	Final result	Detection			Confirmation	Final result	
					Type	Level	*Identification*		RFV	VT	Test result	*Identification*		
2009	Environmental samples	1+	M15	Water	*sp*	1,5	*L. monocytogenes*	Pos.	11 417	3,53	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	1+	G19	New Water	*sp*	8,1	*L. monocytogenes*	Pos.	9 015	2,81	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	1+	G20	Frozen water	*sp*	16,2	*L. monocytogenes*	Pos.	9 228	2,88	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	1+	75	Processed water 1	*se*	2,2	*L. monocytogenes*	Pos.	9 987	2,54	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	1+	77	Processed water 2	*se*	2,2	*L. monocytogenes*	Pos.	10 265	2,61	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	1+	79	Processed water 3	*se*	2,2	*L. monocytogenes*	Pos.	8 796	2,24	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	1+	81	Processed water 4	*se*	2,6	*L. monocytogenes*	Pos.	10 854	2,76	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	B16	PS Workshop cutting table	*No*	/	/	Neg.	10 826	3,46	+	*L. monocytogenes*	Pos.	PD
2009	Environmental samples	2+	B11	PS Fish white fish	*No*	/	*L. monocytogenes*	Pos.	10 355	3,31	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	D17	PS slicer before washing	*No*	/	*L. monocytogenes*	Pos.	10 392	3,32	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	O17	PS slicer before washing	*No*	/	*L. monocytogenes*	Pos.	10 748	3,32	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	Q11	PS threading machine before washing	*No*	/	*L. monocytogenes*	Pos.	10 400	3,62	+	*L. monocytogenes* *L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	M12	PS Slicer stand delicatessen	*sp*	*0,58*	/	Neg.	329	0,10	+	*L. monocytogenes* *L. monocytogenes*	Pos.	PD
2009	Environmental samples	2+	M13	PS Dirty knife delicatessen	*sp*	*0,87*	*L. monocytogenes*	Pos.	1 625	0,50	+	*L. monocytogenes* *L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	G21	PS floor stand delicatessen	*sp*	12,2	*L. monocytogenes*	Pos.	9 534	2,98	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	2+	83	Surface sample 1	*se*	2,6	*L. monocytogenes*	Pos.	10 623	2,70	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	2+	85	Surface sample 2	*se*	2,6	*L. monocytogenes*	Pos.	10 478	2,66	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	M10	Meat products	*No*	/	*L. monocytogenes*	Pos.	3	0,00	-	/	Neg.	ND
2009	Environmental samples	3+	C23	Production workshop residues	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	8 596	2,74	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	D5	Residues dirty red tray	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	5 273	1,68	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	J22	Chicken Skin	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	9 792	3,02	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	K12	Residues stand sandwich	*No*	/	*L. monocytogenes*	Pos.	437	0,13	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+ 3+	Q8	Residues workshop delicatessen	*No*	/	*L. monocytogenes* *L. welshimeri*	Pos.	6 777	2,35	+	*L. monocytogenes* *L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+ 3+	Q9	Residues workshop preparation fishmonger	*No*	/	*L. monocytogenes*	Pos.	10 305	3,58	+	*L. monocytogenes* *L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	AH9	Residue workshop fishmonger	*No*	/	*L.monocytogenes*	Pos.	1210	0,42	+	*L.monocytogenes*	Pos.	PA
2009	Environmental samples	3+	AC13	Meat juice	*No*	/	*L.monocytogenes*	Pos.	11 063	2,76	+	*L.monocytogenes*	Pos.	PA
2009	Environmental samples	3+	Q14	Residues tray waste deli meats	*sp*	21,0	*L. monocytogenes*	Pos.	4	0,00	-	/	Neg.	ND

Environmental samples : storage for 72 hours at 2-8°C

Study	Category	Typ	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
					Type	Level	CONFIRMATION	Final result	Detection			Confirmation	Final result	
							Identification		RFV	VT	Test result	*Identification*		
2009	Environmental samples	1+	O18	Water rinsing	*No*	/	*L. monocytogenes L. innocua*	Pos.	8	0,00	-	*L. innocua*	Neg.	ND
2009	Environmental samples	1+	N14	Water rinsing vegetables	*No*	/	*L. monocytogenes*	Pos.	11 839	3,66	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	1+	M15	Water	*sp*	1,5	*L. monocytogenes*	Pos.	10 431	3,23	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	1+	G19	New Water	*sp*	8,1	*L. monocytogenes*	Pos.	11 349	3,72	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	1+	G20	Frozen water	*sp*	16,2	*L. monocytogenes*	Pos.	11 530	3,78	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	1+	75	Processed water 1	*se*	2,2	*L. monocytogenes*	Pos.	10 718	2,72	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	1+	77	Processed water 2	*se*	2,2	*L. monocytogenes*	Pos.	9 565	2,43	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	1+	79	Processed water 3	*se*	2,2	*L. monocytogenes*	Pos.	10 863	2,76	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	1+	81	Processed water 4	*se*	2,6	*L. monocytogenes*	Pos.	10 958	2,78	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	B16	PS Workshop cutting table	*No*	/	/	-	10 466	3,34	+	*L. monocytogenes*	Pos.	PD
2009	Environmental samples	2+	B11	PS Fish white fish	*No*	/	*L. monocytogenes*	Pos.	10 529	3,36	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	D17	PS slicer before washing	*No*	/	*L. monocytogenes*	Pos.	10 308	1,22	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	O17	PS slicer before washing	*No*	/	*L. monocytogenes*	Pos.	10 185	3,15	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	Q11	PS threading machine before washing	*No*	/	*L. monocytogenes*	Pos.	9 681	3,37	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	M12	PS Slicer stand delicatessen	*sp*	0,6	/	-	1 361	0,42	+	*L. monocytogenes*	Pos.	PD
2009	Environmental samples	2+	M13	PS Dirty knife delicatessen	*sp*	0,9	*L. monocytogenes*	Pos.	10 440	3,23	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	2+	G21	PS floor stand delicatessen	*sp*	12,2	*L. monocytogenes*	Pos.	10 127	3,32	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	2+	83	Surface sample 1	*se*	2,6	*L. monocytogenes*	Pos.	10 924	2,77	+	*L. monocytogenes*	Pos.	PA
2017	Environmental samples	2+	85	Surface sample 2	*se*	2,6	*L. monocytogenes*	Pos.	11 028	2,80	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	M10	Meat products	*No*	/	*L. monocytogenes*	Pos.	5	0,00	-	/	Neg.	ND

Study	Category	Typ	Code	Matrices	Artificial contamination		ISO 11290-1		VIDAS LMX method					Comparison
					Type	Level	CONFIRMATION	Final result	Detection			Confirmation	Final result	
							Identification		RFV	VT	Test result	*Identification*		
2009	Environmental samples	3+	C23	Production workshop residues	*No*	/	*L. monocytogenes L. welshimeri*	Pos.	10 653	3,40	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	D5	Residues dirty red tray	*No*	/	*L. monocytogenes L. welshimeri*	Pos.	11 734	3,66	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	J22	Chicken Skin	*No*	/	*L. monocytogenes L. welshimeri*	Pos.	1 773	0,54	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	K12	Residues stand sandwich	*No*	/	*L. monocytogenes*	Pos.	11 503	3,59	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	Q8	Residues workshop delicatessen	*No*	/	*L. monocytogenes L. welshimeri*	Pos.	9 388	3,26	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	Q9	Residues workshop preparation fishmonger	*No*	/	*L. monocytogenes*	Pos.	9 430	3,28	+	*L. monocytogenes*	Pos.	PA
2009	Environmental samples	3+	Q14	Residues tray waste deli meats	*sp*	21,0	*L. monocytogenes*	Pos.	3	0,00	-	/	Neg.	ND

APPENDIX 4 :

RLOD raw results

Bacterial load :
L = light
M = medium
H = high

Distribution of flora :
A = pure culture of characteristic colonies
B = majority of characteristic colonies
C = minority of characteristic colonies
D = rare characteristic colonies in mixture
E = absence of characteristic colonies

Meat products : Rillettes

Spiked with *Listeria monocytogenes* 1/2 b (L49)
Total flora : 1.5 10^4 CFU/g

Level	CFU/25g	EN ISO 11290-1						Alternative method						
		Half-Fraser		Fraser		Results	Conclusion	VIDAS LMX			Confirmations		Result	Conclusion
		PAL	OAA	PAL	OAA			RFV	TV	Test result	OAA	RLM		
1	0,00	Ø	-LE	-LE	-LE	-	0/6	5	0,00	-	/	/	-	0/6
		Ø	Ø	Ø	Ø	-		4	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		4	0,00	-	/	/	-	
		Ø	Ø	-LE	Ø	-		4	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		5	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		4	0,00	-	/	/	-	
2	0,79	+MA	+MA	+HA	+MA	+	3/6	4	0,00	-	/	/	-	1/6
		-ME	-LE	-ME	-ME	-		3	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		885	0,30	+	+HC*	+HB*	+	
		+MA	+MA	+HA	+MA	+		4	0,00	-	/	/	-	
		Ø	Ø	-LE	-LE	-		4	0,00	-	/	/	-	
		+LA	+MA	+MA	+MA	+		6	0,00	-	/	/	-	
3	1,34	+MA	+MA	+HA	+MA	+	5/6	4	0,00	-	/	/	-	4/6
		Ø	Ø	-LE	-LE	-		9974	3,47	+	+HA	+MA	+	
		+MA	+MA	+HA	+MA	+		6	0,00	-	/	/	-	
		+MA	+MA	+MA	+MA	+		10164	3,53	+	+HA	+MA	+	
		+MA	+MA	+MA	+MA	+		11196	3,89	+	+MA	+MA	+	
		+MA	+MA	+HA	+MA	+		10585	3,68	+	+HA	+MA	+	
4	3,16	+MA	+MA	+HA	+MA	+	5/6	10206	3,55	+	+MA	+HA	+	6/6
		Ø	Ø	-LE	-LE	-		10275	3,57	+	+HA	+HA	+	
		+MA	+MA	+MA	+MA	+		10470	3,64	+	+MA	+MA	+	
		+MA	+LA	+MA	+MA	+		10622	3,69	+	+MA	+HA	+	
		+MA	+MA	+MA	+MA	+		10839	3,77	+	+HA	+MA	+	
		+LA	+LA	+HA	+MA	+		11079	3,85	+	+HA	+HA	+	
5	4,55	+MB	+MB	+HB	+MB	+	6/6	11124	3,54	+	+MA	+MA	+	6/6
		+MB	+MB	+MB	+MB	+		8818	2,80	+	+MB	+LB	+	
		+MB	+MB	+HB	+MB	+		10067	3,20	+	+MA	+MA	+	
		+HB	+MB	+HB	+MB	+		10032	3,19	+	+MA	+MA	+	
		+MA	+MA	+HA	+MA	+		10380	3,30	+	+MA	+MA	+	
		+MB	+MB	+HB	+MB	+		8795	2,80	+	+MB	+LB	+	

Dairy products : Raw milk

Spiked with *Listeria monocytogenes* 1/2 a (L37)
Total flora : 6.0 10^4 CFU/g

Level	CFU/25g	EN ISO 11290-1						Alternative method						
		Half-Fraser		Fraser		Results	Conclusion	VIDAS LMX			Confirmations		Result	Conclusion
		PAL	OAA	PAL	OAA			RFV	VT	Résultat test	OAA	RLM		
1	0,00	Ø	Ø	Ø	-LE	-	0/6	3	0,00	-	/	/	-	0/6
		Ø	Ø	-LE	-LE	-		3	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		4	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		5	0,00	-	/	/	-	
		Ø	Ø	-LE	Ø	-		2	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		3	0,00	-	/	/	-	
2	0,44	+LA	+LA	+MA	+MA	+	3/6	469	0,14	+	-ME	-LE	-	4/6 (1FP)
		Ø	Ø	Ø	Ø	-		9941	3,16	+	+MB	+HB	+	
		Ø	Ø	-LE	Ø	-		10060	3,20	+	+MB	+HB	+	
		+LA	+LA	+MA	+MA	+		10333	3,29	+	+MA	+HB	+	
		Ø	Ø	Ø	Ø	-		10525	3,35	+	+MB	+MB	+	
		+LA	+LA	+MA	+MA	+		0	0,00	-	/	/	-	
3	0,87	+LA	+LA	+LB	+MB	+	4/6	10420	3,31	+	+MB	+HB	-	5/6
		+LA	+LA	+MB	+MB	+		4	0,00	-	/	/	-	
		+LA	+LA	+MA	+MB	+		10407	3,31	+	+MB	+HB	+	
		Ø	Ø	Ø	Ø	-		10750	3,42	+	+MB	+HB	+	
		Ø	Ø	-LE	-LE	-		11297	3,59	+	+MA	+HB	+	
		+LA	+LA	+MA	+MB	+		11277	3,59	+	+MB	+MB	+	
4	1,48	+LA	+LA	+MA	+MB	+	5/6	10148	3,23	+	+MB	+HB	+	5/6
		+LA	+LA	+MA	+MB	+		10095	3,21	+	+HB	+HB	+	
		+LA	+MA	+MA	+MB	+		10228	3,25	+	+MB	+HB	+	
		Ø	Ø	Ø	Ø	-		4	0,00	-	/	/	-	
		+LA	+LA	+MB	+MB	+		10388	3,30	+	+MB	+HB	+	
		+LA	+MA	+MA	+MB	+		10514	3,34	+	+MB	+HB	+	
5	3,49	+LA	+MA	+MB	+MB	+	6/6	9700	3,09	+	+MA	+MB	+	6/6
		+LA	+MA	+MB	+MB	+		9944	3,16	+	+MB	+HB	+	
		+LA	+LA	+MB	+MB	+		9983	3,18	+	+MB	+HB	+	
		+MA	+MA	+HB	+MB	+		10290	3,27	+	+MB	+HB	+	
		+MA	+MA	+MB	+MB	+		10376	3,30	+	+MA	+MB	+	
		+LA	+MA	+MB	+MB	+		10450	3,32	+	+MB	+HB	+	

Dairy products : Raw milk cheese

Spiked with *Listeria monocytogenes* 1/2 a (L37)
Total flora : *3.0 10^8 CFU/g **7.6 10^7 CFU/g

Level	CFU/25g	EN ISO 11290-1						Alternative method						
		Half-Fraser		Fraser		Results	Conclusion	VIDAS LMX			Confirmations		Result	Conclusion
		PAL	OAA	PAL	OAA			RFV	VT	Test result	OAA	RLM		
1*	0,00	ME	-LE	-LE	-LE	-	0/6	6	0,00	-	-ME	-LE	-	0/6
		-LE	-LE	Ø	Ø	-		135	0,04	-	-ME	-LE	-	
		-LE	-LE	-LE	-ME	-		4	0,00	-	-ME	-LE	-	
		-ME	Ø	Ø	Ø	-		6	0,00	-	-ME	-LE	-	
		-ME	Ø	Ø	Ø	-		5	0,00	-	-ME	-LE	-	
		-ME	Ø	Ø	Ø	-		5	0,00	-	-ME	-ME	-	
2*	0,25	Ø	Ø	Ø	Ø	-	1/6	10880	3,16	+	+MA	+MA	+	1/6
		-LE	-LE	Ø	Ø	-		111	0,03	-	-LE	Ø	-	
		+MA	+MA	+MA	+MA	+		-2	0,00	-	-ME	-LE	-	
		-LE	Ø	Ø	Ø	-		2	0,00	-	-ME	-LE	-	
		-ME	Ø	Ø	Ø	-		2	0,00	-	-LE	-LE	-	
		ME	-LE	Ø	Ø	-		3	0,00	-	-ME	-ME	-	
3*	0,50	-LE	Ø	Ø	-LE	-	2/6	10229	2,97	+	+MB	+MB	+	2/6
		-LE	Ø	Ø	Ø	-		3	0,00	-	-LE	-LE	-	
		-LE	Ø	Ø	Ø	-		3	0,00	-	-LE	-LE	-	
		+MA	+MA	+MA	+MA	+		11506	3,34	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		2	0,00	-	-LE	-LE	-	
		-ME	Ø	Ø	Ø	-		1	0,00	-	-ME	-ME	-	
4*	0,91	+MA	+MA	+MA	+MA	+	4/6	6	0,00	-	-ME	-ME	-	5/6
		+MB	+MA	+MA	+MA	+		8198	2,38	+	+MA	+MA	+	
		-ME	Ø	Ø	Ø	-		11058	3,21	+	+HA	+MA	+	
		+MB	+MA	+MA	+MA	+		11417	3,31	+	+MA	+MA	+	
		-LE	Ø	Ø	Ø	-		11859	3,44	+	+MB	+MB	+	
		+MB	+MB	+MA	+MA	+		12245	3,55	+	+MA	+MA	+	
5**	4,47	+MA	+MA	+MA	+MA	+	6/6	10354	3,00	+	+MA	+MA	+	6/6
		+MA	+MA	+MA	+MA	+		10705	3,10	+	+MA	+MA	+	
		+MA	+MA	+HA	+MA	+		10555	3,02	+	+HA	+HA	+	
		+MA	+MA	+HA	+MA	+		10788	3,13	+	+MA	+HA	+	
		+MA	+MA	+HA	+MA	+		11875	3,44	+	+MA	+HA	+	
		+MA	+MA	+HA	+MA	+		11008	3,19	+	+HA	+HA	+	

Seafood products : Smoked salmon

Spiked with *Listeria monocytogenes* 1/2 a (L5)
Total flora : 1.5 10^7 CFU/g

Level	CFU/25g	EN ISO 11290-1						Alternative method						
		Half-Fraser		Fraser		Results	Conclusion	VIDAS LMX			Confirmations		Result	Conclusion
		PAL	OAA	PAL	OAA			RFV	VT	Test result	OAA	RLM		
1	0,00	Ø	-LE	-LE	-LE	-	0/6	12	0,00	-	/	/	-	0/6
		-LE	-LE	-LE	Ø	-		30	0,00	-	/	/	-	
		-LE	-LE	-LE	-LE	-		12	0,00	-	/	/	-	
		-LE	-LE	-ME	-ME	-		11	0,00	-	/	/	-	
		-LE	-LE	Ø	Ø	-		10	0,00	-	/	/	-	
		-LE	-LE	-ME	-ME	-		13	0,00	-	/	/	-	
2	0,25	Ø	Ø	-LE	-LE	-	2/6	5	0,00	+	/	/	-	2/6
		+LA	+LA	+MA	+MA	+		8129	2,83	+	+MA	+MA	+	
		Ø	Ø	Ø	-ME	-		5	0,00	-	/	/	-	
		Ø	Ø	-LE	-LE	-		5	0,00	-	/	/	-	
		+LA	+LA	+MA	+MA	+		12062	4,19	-	+MA	+HA	+	
		Ø	Ø	-LE	-LE	-		4	0,00	-	/	/	-	
3	0,88	Ø	Ø	Ø	-ME	-	4/6	5	0,00	-	/	/	-	5/6
		+LA	+LA	+MA	+MA	+		11519	4,01	+	+HA	+HA	+	
		-LE	Ø	-ME	-LE	-		1116	0,38	+	+MB	+MA	+	
		+LA	+LA	+MA	+MA	+		12258	4,26	+	+MA	+HA	+	
		+LA	+LA	+MA	+MA	+		12023	4,18	+	+HB	+HB	+	
		+LA	+LA	+MA	+MA	+		12261	4,26	+	+MA	+HA	+	
4	2,00	+MA	+MA	+MA	+MA	+	6/6	11022	3,83	+	+MA	+MA	+	6/6
		+MA	+MA	+MA	+MA	+		7345	2,55	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		10711	3,72	+	+MA	+HA	+	
		+MA	+MA	+MA	+MA	+		7172	2,49	+	+MA	+MA	+	
		+MA	+MA	+MA	+MA	+		11745	4,08	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		9137	3,18	+	+MA	+MA	+	

Vegetal products : grated red cabbage

Spiked with *Listeria monocytogenes* 4 b (L58)
Total flora : 6.3 10^8 CFU/g

Level	CFU/25g	EN ISO 11290-1						Alternative method						
		Half-Fraser		Fraser		Half-Fraser PAL	Fraser OAA	Half-Fraser			Fraser		Half-Fraser OAA	Fraser PAL
		PAL	OAA	PAL	OAA			PAL	OAA	PAL	OAA	PAL		
1	0,00	Ø	Ø	Ø	Ø	-	0/6	4	0,00	-	/	/	-	0/6
		Ø	Ø	Ø	-LE	-		2	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		2	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		2	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		2	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		4	0,00	-	/	/	-	
2	0,30	Ø	Ø	Ø	Ø	-	1/6	4	0,00	-	/	/	-	1/6
		Ø	Ø	Ø	Ø	-		3	0,00	-	/	/	-	
		+LA	+LA	+MA	+MA	+		3	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		10826	3,10	+	+MA	+MA	+	
		Ø	Ø	Ø	Ø	-		5	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		3	0,00	-	/	/	-	
3	0,39	Ø	-LE	-LE	-LE	-	3/6	2	0,00	-	/	/	-	2/6
		+LA	+LA	+MA	+MA	+		2051	0,58	+	+LA	+LA	+	
		+LA	+LA	+MA	+MA	+		10340	2,96	+	+MA	+MA	+	
		Ø	Ø	Ø	-LE	-		2	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		2	0,00	-	/	/	-	
		+LA	+LA	+MA	+LA	+		3	0,00	-	/	/	-	
4	0,90	+LA	+LA	+MA	+MA	+	4/6	3	0,00	-	/	/	-	3/6
		+LA	+LA	+MA	+MA	+		2	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		9680	2,77	+	+MA	+HA	+	
		+LA	+LA	+MA	+MA	+		5	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		9577	2,74	+	+MA	+HA	+	
		+LA	+LA	+MA	+MA	+		10231	2,93	+	+MA	+HA	+	
5	1,54	+LA	+LA	+MA	+LA	+	6/6	10784	3,08	+	+MA	+MA	+	6/6
		+MA	+MA	+HA	+MA	+		10208	2,92	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		10954	3,13	+	+MA	+HA	+	
		+LA	+LA	+MA	+MA	+		11078	3,17	+	+MA	+HA	+	
		+LA	+LA	+MA	+MA	+		11429	3,27	+	+MA	+HA	+	
		+LA	+MA	+MA	+MA	+		11570	3,31	+	+MA	+MA	+	

Environmental samples : process water

Spiked with *Listeria monocytogenes* ½ c(L28)
Total flora : 5.0 10^5 CFU/g

Level	CFU/25g	EN ISO 11290-1						Alternative method						
		Half-Fraser		Fraser		Half-Fraser PAL	Fraser OAA	Half-Fraser			Fraser		Half-Fraser OAA	Fraser PAL
		PAL	OAA	PAL	OAA			PAL	OAA	PAL	OAA	PAL		
1	0,00	Ø	Ø	Ø	Ø	-	0/6	3	0,00	-	/	/	-	0/6
		Ø	Ø	Ø	Ø	-		3	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		3	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		4	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		4	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		4	0,00	-	/	/	-	
	0,21	Ø	Ø	Ø	Ø	-	1/6	4	0,00	-	/	/	-	3/6
		Ø	-LE	Ø	Ø	-		11224	3,57	+	+MA	+MA	+	
		Ø	Ø	-ME	-LE	-		3	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		5	0,00	-	/	/	-	
		+LA	+LA	+MA	+MA	+		11222	3,57	+	+MA	+MA	+	
		Ø	Ø	-LE	-LE	-		11359	3,67	+	+MA	+MA	+	
2	0,34	Ø	Ø	-LE	Ø	-	3/6	10295	3,58	+	+MA	+MA	+	4/6
		Ø	Ø	-LE	Ø	-		4	0,00	-	/	/	-	
		Ø	Ø	Ø	Ø	-		10160	3,53	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		10893	3,79	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		10463	3,64	+	+MA	+MA	+	
		+LA	+LA	+HA	+MA	+		6	0,00	-	/	/	-	
4	0,83	+MA	+LA	+HA	+MA	+	5/6	4	0,00	-	/	/	-	4/6
		Ø	Ø	Ø	Ø	-		10948	3,81	+	+MA	+MA	+	
		+LA	+LA	+MA	+MA	+		5	0,00	-	/	/	-	
		+LA	+LA	+MA	+MA	+		11515	4,00	+	+MA	+MA	+	
		+MA	+MA	+MA	+MA	+		11256	3,91	+	+MA	+MA	+	
		+MA	+LA	+HA	+MA	+		11052	3,84	+	+MA	+MA	+	
5	1,96	+MA	+MA	+MA	+MA	+	5/6	8983	3,12	+	+MA	+MA	+	6/6
		+MA	+LA	+MA	+MA	+		9189	3,19	+	+HA	+MA	+	
		+MA	+MA	+HA	+MA	+		9305	3,23	+	+MA	+HA	+	
		Ø	Ø	Ø	Ø	-		9685	3,37	+	+MA	+MA	+	
		+MA	+LA	+MA	+MA	+		9869	3,43	+	+MA	+MA	+	
		+MA	+MA	+MA	+MA	+		9924	3,45	+	+MA	+MA	+	
Level	CFU/25g	EN ISO 11290-1						Alternative method						
		Half-Fraser		Fraser		Half-Fraser PAL	Fraser OAA	Half-Fraser			Fraser		Half-Fraser OAA	Fraser PAL
		PAL	OAA	PAL	OAA			PAL	OAA	PAL	OAA	PAL		
6	2,35	+MA	+LA	+HB	+MB	+	6/6	9975	3,17	+	+MA	+MA	+	6/6
		+MB	+MB	+MB	+MB	+		9949	3,16	+	+MA	+MA	+	
		+MB	+MB	+MB	+MB	+		10203	3,25	+	+MA	+MA	+	
		+MA	+MA	+MB	+MB	+		10291	3,27	+	+MA	+MA	+	
		+MA	+LA	+MB	+MB	+		10562	3,36	+	+MA	+MA	+	
		+MB	+MB	+HB	+MA	+		10511	3,34	+	+MA	+MA	+	

RLOD: composite foods (2017 study)

Raw results

Caption :

ST : sample type
SN : sample number
: sample identity
◊ : level determined by 3 to 5 enumerations
sp : spiking
se : seeding
nc : naturally contaminated
cm: contamination by mixture
+ / Pos : positive result
- / Neg : negative result
/ : test not realized
Ø : absence of colonies
PA : positive agreement
NA : negative agreement
PD : positive deviation
ND : negative deviation
FN : false negative result
FP : false positive result
PP: presumed positive result before confirmation
A : absence
P : presence
0 / 1 / 2 / 3 / 4 : level of typical flora, from absence to high
Ø / L / M / H : level of annex flora, from absence to high
h+/h-: oresence or absence of halo
I : result after re-isolation
(XXX) : number of typical colonies

Total flora : 3.0 10^4 CFU/g

Category	#	Sample	Contamination			RM: NF EN ISO 11290-1						AM: Vidas LMX					Number of positive results per method
			Strain	Type	Level (CFU/25 g)	Half Fraser		Fraser		Confir-mation	Final result	Vidas LMX		Conf. 1	Conf. 2	Final result	
						O&A	PALCAM	O&A	PALCAM			VT	Result	O&A	after purif.		
Composite foods	T01	Mixed salad	/	/	/	0;M	0;M	/	/	/	A	0.00	-	0;M	/	**A**	RM: 0/5 AM: 0/5
	T02					0;M	0;M	/	/	/	A	0.00	-	0;M	/	**A**	
	T03					0;M	0;M	/	/	/	A	0.00	-	0;L	/	**A**	
	T04					0;M	0;L	/	/	/	A	0.00	-	0;Ø	/	**A**	
	T05					0;M	0;M	/	/	/	A	0.00	-	0;M	/	**A**	
	M1		LIS.4.5	se	0.5	0;L	0;L	0;M	0;H	A	**A**	3.35	+	3h+;Ø	/	**P**	RM: 3/20 AM: 9/20
	M2					0;L	0;L	0;M	0;H	A	**A**	0.00	-	0;L	/	**A**	
	M3					0;L	0;L	0;M	0;H	A	**A**	0.00	-	0;L	/	**A**	
	M4					0;Ø	0;L	0;M	0;H	A	**A**	0.01	+	1h+;L	/	**P**	
	M5					0;Ø	0;L	0;M	0;H	A	**A**	0.00	-	0;L	/	**A**	
	M6					0;Ø	0;L	0;M	0;H	A	**A**	0.00	-	0;L	/	**A**	
	M7					0;L	0;L	0;M	0;M	A	**A**	0.07	+	1h+;L	/	**P**	
	M8					0;L	0;L	0;M	0;H	A	**A**	0.00	-	0;L	/	**A**	
	M9					0;L	0;L	0;M	0;M	A	**A**	0.00	-	0;L	/	**A**	
	M10					0;Ø	0;L	0;M	0;H	A	**A**	0.00	-	0;L	/	**A**	
	M11					2h+;Ø	2;Ø	2h+;Ø	3;M	P	**P**	0.00	-	0;Ø	/	**A**	
	M12					2h+;Ø	2;Ø	2h+;Ø	3;L	P	**P**	0.00	-	0;Ø	/	**A**	
	M13					0;L	0;L	0;M	0;H	A	**A**	3.15	+	2h+;Ø	/	**P**	
	M14					0;L	0;L	0;L	0;H	A	**A**	0.00	-	0;L	/	**A**	
	M15					0;L	0;L	0;M	0;H	A	**A**	0.06	+	1h+;Ø	/	**P**	
	M16					2h+;Ø	2;L	2h+;Ø	3;M	P	**P**	0.00	-	0;M	/	**A**	
	M17					0;Ø	0;L	0;H	0;H	A	**A**	0.00	-	0;L	/	**A**	
	M18					0;L	0;L	0;M	0;H	A	**A**	3.05	+	2h+;Ø	/	**P**	
	M19					0;L	0;L	0;M	0;H	A	**A**	3.25	+	2h+;Ø	/	**P**	
	M20					0;Ø	0;L	0;M	0;H	A	**A**	3.16	+	2h+;Ø	/	**P**	
	FR1				3.6	1h+;Ø	1;L	3h+;Ø	3M	P	**P**	1.84	+	2h+;Ø	/	**P**	RM: 5/5 AM: 5/5
	FR2					1h+;Ø	1;L	3h+;Ø	3M	P	**P**	0.07	+	1h+;Ø	/	**P**	
	FR3					1h+;Ø	1;L	3h+;Ø	3M	P	**P**	1.36	+	2h+;Ø	/	**P**	
	FR4					1h+;Ø	1;L	3h+;Ø	3M	P	**P**	1.31	+	1h+;Ø	/	**P**	
	FR5					1h+;Ø	1;L	3h+;Ø	3M	P	**P**	2.57	+	2h+;Ø	/	**P**	

Total flora : 3.0 10^4 CFU/g

Category	#	Sample	Contamination			RM: NF EN ISO 11290-1						AM: Vidas LMX						Number of positive results per method
			Strain	Type	Level (CFU/25 g)	Half Fraser		Fraser		onfirmation	Final result	Vidas LMX		Confirmation 1	Confirmation 2		Final result	
						O&A	Palcam	O&A	Palcam			VT	Results	O&A	ChromID L.mono	Identification		
Composite foods	O1	**Salad of pasta**	/	/	/	0h+L	0h-L	0h+H	0h-L	/	A	0,00	A	0LØ	0LØ	/	A	RM : 0/5 AM : 0/5
	O2					0h+L	0h-L	0h+H	0h-L	/	A	0,00	A	0LØ	0LØ	/	A	
	O3					0h+L	0h-L	0h+H	0h-L	/	A	0,00	A	0Ø	0Ø	/	A	
	O4					0h+L	0h-L	0h+H	0h-L	/	A	0,00	A	0LØ	0LØ	/	A	
	O5					0h+L	0h-L	0h+H	0h-L	/	A	0,00	A	0Ø	0LØ	/	A	
	f1		LIS.4.46	se	0,8	2h+L	2h-L	3h+H	3h-H	L.m	P	2,68	P	3h+Ø	4L	L.m	P	RM : 15/20 AM: 14/20
	f2					3h+L	3h-L	3h+L	3h-L	L.m	P	2,72	P	3h+Ø	3Ø	L.m	P	
	f3					1h+H	1h-M	3h+L	3h-M	L.m	P	0	A	0LØ	0LØ	/	A	
	f4					3h+L	3h-H	3h+L	3h-H	L.m	P	2,72	P	4h+L	4Ø	L.m	P	
	f5					2h+L	2h-L	4h+L	4h-L	L.m	P	2,70	P	4h+L	3L	L.m	P	
	f6					3h+M	3h-M	3h+L	3h-M	L.m	P	2,69	P	3h+L	3Ø	L.m	P	
	f7					3h+L	3h-L	4h+L	3h-L	L.m	P	2,76	P	3h+L	3L	L.m	P	
	f8					0h+L	0h-L	0h+M	0h-L	/	A	2,71	P	4h+L	4L	L.m	P	
	f9					2h+L	3h-L	3h+L	3h-M	L.m	P	0	A	0LØ	0LØ	/	A	
	f10					0h+M	0h-H	0h+M	0h-L	/	A	0	A	0LØ	0LØ	/	A	
	f11					0h+L	0h-L	0h+M	0h-L	/	A	2,60	P	4h+L	4L	L.m	P	
	f12					2h+L	1h-L	4h+L	3h-M	L.m	P	2,76	P	3h+L	3L	L.m	P	
	f13					0h+L	0h-L	0h+M	0h-L	/	A	2,66	P	4h+L	4L	L.m	P	
	f14					3h+L	3h-L	4h+L	3h-M	L.m	P	0	A	0LØ	0LØ	/	A	
	f15					3h+L	2h-L	3h+L	3h-M	L.m	P	0	A	0LØ	0LØ	/	A	
	f16					3h+L	2h-L	4h+L	3h-L	L.m	P	2,66	P	3h+Ø	4Ø	L.m	P	
	f17					2h+L	1h-L	4h+L	3h-L	L.m	P	2,66	P	3h+Ø	4Ø	L.m	P	
	f18					0h+M	0h-L	0h+M	0h-L	/	A	0	A	0LØ	0LØ	/	A	
	f19					3h+L	2h-L	3h+L	3h-L	L.m	P	2,66	P	4h+L	4L	L.m	P	
	f20					2h+L	2h-M	4h+L	3h-H	L.m	P	2,70	P	3h+Ø	3Ø	L.m	P	
	F1				3	3h+L	3h-H	3h+L	3h-H	L.m	P	2,72	P	4h+L	4L	L.m	P	RM 5/5 AM 5/5
	F2					2h+L	3h-L	2h+L	2h-L	L.m	P	2,74	P	4h+M	4L	L.m	P	
	F3					1h+M	3h-M	3h+L	3h-M	L.m	P	2,69	P	4h+L	4L	L.m	P	
	F4					3h+L	3h-L	3h+L	2h-L	L.m	P	2,77	P	4h+L	4L	L.m	P	
	F5					3h+L	3h-M	4h+L	3h-L	L.m	P	2,71	P	4h+Ø	4Ø	L.m	P	

APPENDIX 5

Inclusivity and exclusivity

Inclusivity study

Reference	Strain	Origin	inoculation level CFU/225ml LMX broth	RFV	TV	Test result	Isolation		inoculation level CFU/225ml LMX broth + 25ml UHT milk	RFVF	TV	Test result
							OAA	RLM				
L4	*Listeria monocytogenes* 1/2a	ATCC 35152	14,8	10265	2,94	+	+MA	+HA	14,8	10220	2,92	+
L5	*Listeria monocytogenes* 1/2a	Smoked salmon bacon	3,8	4978	1,54	+	+MA	+HA	3,8	11532	3,57	+
L6	*Listeria monocytogenes* 1/2a	Pizza	5,2	586	0,18	+	+LA	+LA				
L7	*Listeria monocytogenes* 1/2a	Munster crust	4	797	0,24	+	+MA	+MA				
L9	*Listeria monocytogenes* 1/2a	Munster crust	6,3	9151	2,82	+	+MA	+LA				
L10	*Listeria monocytogenes* 1/2a	Rillettes	4	276	0,08	+	+MA	+MA	4	11393	3,52	+
L11	*Listeria monocytogenes* 1/2a	Munster crust	5	8615	2,66	+	+MA	+MA				
L12	*Listeria monocytogenes* 1/2a	Smoked salmon	6,5	1273	0,39	+	+LA	+LA				
L13	*Listeria monocytogenes* 1/2b	Pig ear	3,7	207	0,06	+	+MA	+MA	3,7	11516	3,56	+
L14	*Listeria monocytogenes* 1/2c	Chopped steak	6,2	596	0,18	+	+LA	+LA				
L15	***Listeria monocytogenes* 1/2c**	**Beef MP**	**4,7**	**109**	**0,03**	**-**	**+MA**	**+MA**	**4,7**	**11720**	**3,62**	**+**
L16	*Listeria monocytogenes* 1/2c	Minced meat	1	454	0,14	+	+LA	+LA				
L17	*Listeria monocytogenes* 1/2c	Chest	4,7	374	0,11	+	+LA	+LA				
L18	*Listeria monocytogenes* 1/2c	Munster crust	4,5	467	0,14	+	+LA	+LA				
L20	*Listeria monocytogenes* 1/2	Smoked salmon pieces	4,4	11186	3,89	+	+MA	+MA	4,4	10390	3,61	+
L25	*Listeria monocytogenes* 1/2	Hen	19,5	3528	1,10	+	+LA	+MA				
L28	*Listeria monocytogenes* 1/2c	Surface sponge	4,3	10225	3,16	+	+MA	+HA	4,3	10101	3,12	+
L32	*Listeria monocytogenes* 4b	Munster	19,5	10757	3,36	+	+MA	+MA				
L33	*Listeria monocytogenes* 4b	ATCC 19115	16,5	10701	3,34	+	+MA	+MA				
L37	*Listeria monocytogenes* 1/2b	Raw milk maroille	15	11679	3,64	+	+MA	+MA				
L39	*Listeria monocytogenes*	Ham dry sausage	17,2	12106	3,78	+	+MA	+MA				

Reference	Strain	Origin	inoculation level CFU/225ml LMX broth	RFV	TV	Test result	Isolation		inoculation level CFU/225ml LMX broth + 25ml UHT milk	RFVF	TV	Test result
							OAA	RLM				
L40	*Listeria monocytogenes* 1/2a	Munster farmer	18,7	1432	0,44	+	+MA	+MA				
L42	*Listeria monocytogenes* 1/2a	Chicken breast	18	10268	3,20	+	+MA	+MA				
L43	*Listeria monocytogenes* 1/2a	Chopped steak	15	4700	1,46	+	+MA	+MA				
L44	*Listeria monocytogenes* 1/2a	Sausage	4,6	10362	3,20	+	+HA	+HA	4,6	10267	3,17	+
L45	*Listeria monocytogenes* 1/2a	Rabbit and hazelnut terrine	15	9008	2,81	+	+MA	+MA				
L47	*Listeria monocytogenes* 1/2a	Hash browns	6,8	10581	3,27	+	+MA	+MA	6,8	10359	3,2	+
L48	*Listeria monocytogenes* 1/2b	Pork tongue	5,9	11083	3,46	+	+LA	+LA				
L49	*Listeria monocytogenes* 1/2b	Poultry liver cream	6,6	10308	3,22	+	+MA	+HA				
L51	*Listeria monocytogenes* 1/2b	Germain matured	6,4	10947	3,41	+	+MA	+MA				
L52	*Listeria monocytogenes ½ b*	SLCC 2755	6	2283	0,71	+	+LA	+LA				
L53	*Listeria monocytogenes* 1/2c	Chopped steak	4,7	10709	3,31	+	+MA	+MA	4,7	10420	3,22	+
L54	*Listeria monocytogenes* 1/2c	Beef bourguignon	6,6	313	0,09	+	+LA	+LA				
L55	*Listeria monocytogenes* 3b	SLCC 2540	10,5	11361	3,54	+	+MA	+MA				
L56	*Listeria monocytogenes* 3c	SLCC 2479	5,9	253	0,07	+	+LA	+LA				
L57	*Listeria monocytogenes* 4a	ATCC 19114	3,2	12145	3,76	+	+MA	+MA	3,2	10996	3,4	+
L58	*Listeria monocytogenes* 4b	Salad	7,2	10622	3,31	+	+MA	+MA				
L60	*Listeria monocytogenes* 4d	ATCC 19117	9,3	10294	3,21	+	+MA	+MA				
L61	*Listeria monocytogenes* 4e	ATCC 19118	4,8	2786	0,87	+	+LA	+LA				
L62	*Listeria monocytogenes* 4e	Reblochon	3,9	11095	3,43	+	+MA	+MA	3,9	9830	3,04	+
L63	*Listeria monocytogenes* 4e	Munster	4	10053	3,11	+	+MA	+MA	4	10030	3,1	+
L67	*Listeria monocytogenes* 7	SLCC 2482	4,4	10053	3,11	+	+HA	+HA	4,4	10223	3,16	+
L69	*Listeria monocytogenes*	Sausage	6	10310	3,58	+	+MA	+MA	6	11330	3,94	+
L 70	*Listeria monocytogenes*	Salmon Ireland	7,7	10439	3,63	+	+MA	+HA	7,7	10033	3,449	+

Reference	Strain	Origin	inoculation level CFU/225ml LMX broth	RFV	TV	Test result	Isolation		inoculation level CFU/225ml LMX broth + 25ml UHT milk	RFVF	TV	Test result
							OAA	RLM				
L116	*Listeria monocytogenes* 1/2a	Fish shell	5,5	10518	3,66	+	+MA	+MA	5,5	9993	3,47	+
L117	*Listeria monocytogenes* 1/2c	Montbéliard sausage	6,9	10698	3,72	+	+MA	+MA	6,9	10111	3,52	+
L119	*Listeria monocytogenes*	Spinach	17,2	10138	3,52	+	+MA	+MA	17,2	10667	3,71	+
L121	*Listeria monocytogenes*	Neufchâtel cheese	17,5	1284	0,44	+	+MA	+MA	17,5	10944	3,81	+
L123	*Listeria monocytogenes*	Mozzarella	15,8	9743	3,39	+	+MA	+MA	15,8	11891	4,14	+
L124	*Listeria monocytogenes*	Perch fillet	17,8	160	0,05	+	+LA	+LA	17,8	597	0,2	+
L125	*Listeria monocytogenes*	Fried vegetables	15,3	10313	3,59	+	+MA	+MA	15,3	9917	3,45	+
L128	*Listeria monocytogenes* 1/2a	Soybean meal	13,8	11399	3,96	+	+MA	+MA	13,8	9747	3,39	+
L129	*Listeria monocytogenes* 1/2a	Hash browns	2,9	11879	4,13	+	+MA	+MA	2,9	10140	3,53	+
L130	*Listeria monocytogenes*	Chopped steak	15,3	1517	0,52	+	+LA	+LA	15,3	10105	3,51	+
L137	*Listeria monocytogenes*	Coulommier raw milk	13	689	0,23	+	+MA	+MA	13	6582	2,29	+
L141	*Listeria monocytogenes*	Environmental levy	15,8	11331	3,94	+	+MA	+MA	15,8	10661	3,71	+
L149	*Listeria monocytogenes*	Environmental levy	12,3	245	0,08	+	+LA	+LA	12,3	8121	2,82	+
L152	*Listeria monocytogenes*	Environmental levy	11,3	1510	0,52	+	+MA	+MA	11,3	8429	2,93	+
L156	*Listeria monocytogenes*	French fries	10,3	11018	3,83	+	+MA	+MA	10,3	11527	4,01	+
L176	***Listeria monocytogenes***	**Beef steak**	**9,3**	**54**	**0,01**	**-**	**+LA**	**+LA**	**9,3**	**11266**	**3,92**	**+**

Exclusivity study

Reference	Strain	Origin	Inoculation level in non selective broth CFU/225ml	Water bath			Heat&Go			Isolation	
				RFV	TV	Result	RFV	TV	Result	OAA	RLM
BA2	*Bacillus cereus*	Betteraves	4,50E+05	65	0,02	-	85	0	-	/	/
BA24	*Bacillus mycoïdes*	Prélévement environnement	5,70E+05	136	0,04	-				Ø	Ø
BA4	*Bacillus stearothermophilus*	Produit laitier	3,80E+05	18	0,00	-	11	0	-	/	/
BA5	*Bacillus sphaericus*	Produit carné	7,20E+05	74	0,02	-	173	0,1	+	/	/
			6,40E+05	230	0,07	+				Ø	Ø
E3	*Streptococcus bovis*	Collection	5,60E+05	3	0,00	-	8	0	-	/	/
E8	*Enterococcus durans*	Produit carné	4,60E+05	17	0,00	-	10	0	-	/	/
E17	*Streptococcus equinus*	Collection	6,00E+04	3	0,00	-	4	0	-	/	/
E6	*Enterococcus faecalis*	Collection ATCC 19433	7,50E+05	32	0,00	-	35	0	-	/	/
E7	*Enterococcus faecium*	Collection CIP 5433	8,40E+04	3	0,00	-	3	0	-	/	/
E14	*Streptococcus anginosus*	Collection	1,50E+05	3	0,00	-	4	0	-	/	/
33	*Lactobacillus casei*	Produit laitier	4,50E+05	14	0,00	-	5	0	-	/	/
L139	*Jonesia denitrificans*	Collection	1,70E+05	4	0,00	-				-LE	Ø
ST26	*Staphylococcus intermedius*	Collection	7,00E+04	335	0,10	+				Ø	Ø
ST17	*Staphylococcus aureus*	Yaourt glacé	3,90E+05	325	0,10	+				Ø	Ø
ST3	*Staphylococcus epidermidis*	Yaourt	3,30E+05	36	0,01	-				Ø	Ø
M1	*Micrococcus*	Environnement	3,00E+04	1	0,00	-	2	0	-	/	/
L 140	*Listeria seeligeri*	Frites surgelées	1,00E+05	19	0,00	-				-LE	-LE
L 147	*Listeria grayi*	ATCC 25 401	3,40E+04	4	0,00	-				-LA	-MA
L 148	*Listeria seeligeri*	Prélévement environnement	4,00E+04	7	0,00	-	5	0	-	-LE	-LE
L 155	*Listeria welshimeri*	Filet de saumon	1,70E+05	103	0,03	-	141	0,1	-	-ME	-ME
L 157	*Listeria ivanovii spp. ivanovii*	Collection	1,40E+05	14	0,00	-				-LE	-LE
L179	*Listeria ivanovii*	Prélévement environnement	1,10E+05	11	0,00	-	26	0	-	-ME	-ME
L170	*Listeria ivanovii*	Collection	1,20E+05	41	0,01	-	96	0	-	/	/
L64	*Listeria innocua*	Epoisses	1,20E+05	140	0,04	-				-ME	-ME
L76	*Listeria innocua* 6b	Steak haché	6,00E+04	132	0,04	-				-ME	-ME
L80	*Listeria ivanovii*	Collection	1,70E+05	25	0,00	-	51	0	-	-ME	-ME
L83	*Listeria seeligeri* 1/2b	Langue	1,40E+05	26	0,00	-	17	0	-	-ME	-ME
L91	*Listeria welshimeri*	Rosette Aoste	1,30E+05	61	0,02	-				-ME	-ME
L108	*Listeria innocua*	Gorgonzola	9,50E+04	111	0,03	-				-ME	-ME
L142	*Listeria seeligeri*	Fromage lait cru	1,70E+05	8	0,00	-	8	0	-	-LE	-LE
L151	*Listeria ivanovii*	Steak haché	9,50E+04	37	0,01	-	21	0	-	/	/

Reference	Strain	Inoculation level in non selective broth CFU/225ml	Reference method					Alternative method					
			half-Fraser		Fraser		result	VIDAS LMX			Confirmations		Final result
			PAL	OAA	PAL	OAA		RFV	VT	Result	OAA	RLM	
BA5	*Bacillus sphaericus*	3,30E+05	-LE	-LE	-LE	-LE	-	3	0,00	-	Ø	Ø	-
ST17	*Staphylococcus aureus*	5,50E+05	Ø	Ø	-LE	-LE	-	5	0,00	-	Ø	Ø	-
ST26	*Staphylococcus intermedius*	8,50E+04	Ø	Ø	-LE	-ME	-	3	0,00	-	Ø	Ø	-

APPENDIX 6

Interlaboratory study raw results

Expert Lab.

Code	Reference method ISO 11290-1				Result	Comparison / expected result	Code	Alternative method: VIDAS LMX					Comparison / expected result
	half-Fraser		Fraser					Test		Test result	Confirmation OAA	Result	
	O & A	Oxford	O & A	Oxford				RFV	TV				
27	-	-	-	-	-	=	5	2	0,00	-	-	-	=
28	-	-	-	-	-	=	6	2	0,00	-	-	-	=
35	-	-	-	-	-	=	9	2	0,00	-	-	-	=
36	-	-	-	-	-	=	10	2	0,00	-	-	-	=
41	-	-	-	-	-	=	13	2	0,00	-	-	-	=
42	-	-	-	-	-	=	14	2	0,00	-	-	-	=
43	-	-	-	-	-	=	19	2	0,00	-	-	-	=
44	-	-	-	-	-	=	20	1	0,00	-	-	-	=
29	+	+	+	+	+	=	3	10528	2,97	+	+	+	=
30	+	+	+	+	+	=	4	10808	3,05	+	+	+	=
31	+	+	+	+	+	=	11	33	0,00	-	1+	-	#
32	+	+	+	+	+	=	12	11493	3,24	+	+	+	=
39	+	+	+	+	+	=	17	10887	3,07	+	+	+	=
40	+	+	+	+	+	=	18	11528	3,25	+	+	+	=
45	+	+	+	+	+	=	23	9814	2,77	+	+	+	=
46	+	+	+	+	+	=	24	10411	2,94	+	+	+	=
25	+	+	+	+	+	=	1	12659	3,57	+	+	+	=
26	+	+	+	+	+	=	2	12408	3,50	+	+	+	=
33	+	+	+	+	+	=	7	10720	3,02	+	+	+	=
34	+	+	+	+	+	=	8	9545	2,69	+	+	+	=
37	+	+	+	+	+	=	15	11665	3,29	+	+	+	=
38	+	+	+	+	+	=	16	11761	3,32	+	+	+	=
47	+	+	+	+	+	=	21	10361	2,92	+	+	+	=
48	+	+	+	+	+	=	22	10372	2,92	+	+	+	=

TVC (CFU/mL) : 50 000

Lab. A

Code	Reference method ISO 11290-1				Result	Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser					Test	Test result	Confirmation OAA	Final result	
	O & A	Oxford	O & A	Oxford				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	2,51	+	+	+	=
30	+	+	+	+	+	=	4	2,50	+	+	+	=
31	+	+	+	+	+	=	11	2,57	+	+	+	=
32	+	+	+	+	+	=	12	2,57	+	+	+	=
39	+	+	+	+	+	=	17	2,52	+	+	+	=
40	+	+	+	+	+	=	18	2,51	+	+	+	=
45	+	+	+	+	+	=	23	2,69	+	+	+	=
46	+	+	+	+	+	=	24	2,71	+	+	+	=
25	+	+	+	+	+	=	1	2,35	+	+	+	=
26	+	-	+	+	+	=	2	2,55	+	+	+	=
33	+	+	+	+	+	=	7	2,39	+	+	+	=
34	+	-	+	+	+	=	8	1,94	+	+	+	=
37	+	+	+	+	+	=	15	2,45	+	+	+	=
38	+	+	+	+	+	=	16	1,60	+	+	+	=
47	+	+	+	+	+	=	21	2,51	+	+	+	=
48	+	+	+	+	+	=	22	2,64	+	+	+	=

TVC (CFU/mL) : <1

Lab. B

Code	Reference method ISO 11290-1					Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation OAA	Final result	
	O & A	OAA	O & A	OAA				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	2,59	+	+	+	=
30	+	+	+	+	+	=	4	2,41	+	+	+	=
31	+	+	+	+	+	=	11	2,37	+	+	+	=
32	+	+	+	+	+	=	12	2,39	+	+	+	=
39	+	+	+	+	+	=	17	2,58	+	+	+	=
40	+	+	+	+	+	=	18	2,69	+	+	+	=
45	+	+	+	+	+	=	23	2,48	+	+	+	=
46	+	+	+	+	+	=	24	2,40	+	+	+	=
25	+	+	+	+	+	=	1	2,27	+	+	+	=
26	+	+	+	+	+	=	2	1,60	+	+	+	=
33	+	+	+	+	+	=	7	2,22	+	+	+	=
34	+	+	+	+	+	=	8	2,51	+	+	+	=
37	+	+	+	+	+	=	15	1,38	+	+	+	=
38	+	+	+	+	+	=	16	0,51	+	+	+	=
47	+	+	+	+	+	=	21	1,95	+	+	+	=
48	+	+	+	+	+	=	22	1,32	+	+	+	=

TVC (CFU/mL) : 1 900

Lab. C

Code	Reference method ISO 11290-1					Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation OAA	Final result	
	O & A	Oxford	O & A	Oxford				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	2,31	+	+	+	=
30	+	+	+	+	+	=	4	2,18	+	+	+	=
31	+	+	+	+	+	=	11	2,34	+	+	+	=
32	+	+	+	+	+	=	12	2,20	+	+	+	=
39	+	+	+	+	+	=	17	2,49	+	+	+	=
40	+	+	+	+	+	=	18	2,49	+	+	+	=
45	+	+	+	+	+	=	23	2,55	+	+	+	=
46	+	+	+	+	+	=	24	2,45	+	+	+	=
25	+	+	+	+	+	=	1	2,62	+	+	+	=
26	+	+	+	+	+	=	2	2,55	+	+	+	=
33	+	+	+	+	+	=	7	2,57	+	+	+	=
34	+	+	+	+	+	=	8	2,61	+	+	+	=
37	+	+	+	+	+	=	15	1,98	+	+	+	=
38	+	+	+	+	+	=	16	2,43	+	+	+	=
47	+	+	+	+	+	=	21	2,73	+	+	+	=
48	+	+	+	+	+	=	22	2,71	+	+	+	=

TVC (CFU/mL) : 1200

Lab. D

Code	Reference method ISO 11290-1					Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result				Test result	Confirmation Chrom ID OAA	Final result	
	O & A	Oxford	O & A	Oxford				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	3,32	+	+	+	=
30	+	+	+	+	+	=	4	3,38	+	+	+	=
31	+	+	+	+	+	=	11	3,41	+	+	+	=
32	+	+	+	+	+	=	12	3,33	+	+	+	=
39	+	+	+	+	+	=	17	3,33	+	+	+	=
40	+	+	+	+	+	=	18	3,01	+	+	+	=
45	+	+	+	+	+	=	23	3,35	+	+	+	=
46	+	+	+	+	+	=	24	3,44	+	+	+	=
25	+	+	+	+	+	=	1	2,41	+	+	+	=
26	+	+	+	+	+	=	2	2,92	+	+	+	=
33	+	+	+	+	+	=	7	1,75	+	+	+	=
34	+	+	+	+	+	=	8	1,43	+	+	+	=
37	+	+	+	+	+	=	15	1,30	+	+	+	=
38	+	+	+	+	+	=	16	1,05	+	+	+	=
47	+	+	+	+	+	=	21	1,86	+	+	+	=
48	+	+	+	+	+	=	22	1,12	+	+	+	=

TVC (CFU/mL) : 1 500

Lab. E

Code	Reference method ISO 11290-1					Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation OAA	Final result	
	O & A	Oxford	O & A	Oxford				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	3,54	+	+	+	=
30	+	+	+	+	+	=	4	3,52	+	+	+	=
31	+	+	+	+	+	=	11	3,48	+	+	+	=
32	+	+	+	+	+	=	12	3,51	+	+	+	=
39	+	+	+	+	+	=	17	3,62	+	+	+	=
40	+	+	+	+	+	=	18	3,63	+	+	+	=
45	+	+	+	+	+	=	23	3,59	+	+	+	=
46	+	+	+	+	+	=	24	3,58	+	+	+	=
25	+	+	+	+	+	=	1	0,55	+	+	+	=
26	+	+	+	+	+	=	2	1,26	+	+	+	=
33	+	+	+	+	+	=	7	0,46	+	+	+	=
34	+	+	+	+	+	=	8	0,65	+	+	+	=
37	+	+	+	+	+	=	15	0,39	+	+	+	=
38	+	+	+	+	+	=	16	0,54	+	+	+	=
47	+	+	+	+	+	=	21	0,27	+	+	+	=
48	+	+	+	+	+	=	22	0,38	+	+	+	=

TVC (CFU/mL) : 3 900

Lab. G

Code	Reference method ISO 11290-1					Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation OAA	Final result	
	O & A	Oxford	O & A	Oxford				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	3,14	+	+	+	=
30	+	+	+	+	+	=	4	3,12	+	+	+	=
31	+	+	+	+	+	=	11	2,92	+	+	+	=
32	+	+	+	+	+	=	12	2,97	+	+	+	=
39	+	+	+	+	+	=	17	3,24	+	+	+	=
40	+	+	+	+	+	=	18	3,32	+	+	+	=
45	+	+	+	+	+	=	23	3,21	+	+	+	=
46	+	+	+	+	+	=	24	3,23	+	+	+	=
25	+	+	+	+	+	=	1	3,44	+	+	+	=
26	+	+	+	+	+	=	2	3,41	+	+	+	=
33	+	+	+	+	+	=	7	3,36	+	+	+	=
34	+	+	+	+	+	=	8	3,24	+	+	+	=
37	+	+	+	+	+	=	15	3,56	+	+	+	=
38	+	+	+	+	+	=	16	3,54	+	+	+	=
47	+	+	+	+	+	=	21	3,54	+	+	+	=
48	+	+	+	+	+	=	22	3,64	+	+	+	=

TVC (CFU/mL) :

Lab. H

Code	Méthode de référence ISO 11290-1					Comparaison / Résultat attendu	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation	Final result	
	O & A	2nd media	O & A	2nd media				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	3,23	+	+	+	=
30	+	+	+	+	+	=	4	3,17	+	+	+	=
31	+	+	+	+	+	=	11	3,01	+	+	+	=
32	+	+	+	+	+	=	12	2,99	+	+	+	=
39	+	+	+	+	+	=	17	3,17	+	+	+	=
40	+	+	+	+	+	=	18	3,23	+	+	+	=
45	+	+	+	+	+	=	23	3,27	+	+	+	=
46	+	+	+	+	+	=	24	3,14	+	+	+	=
25	+	+	+	+	+	=	1	0,65	+	+	+	=
26	+	+	+	+	+	=	2	1,87	+	+	+	=
33	+	+	+	+	+	=	7	2,13	+	+	+	=
34	+	+	+	+	+	=	8	1,41	+	+	+	=
37	+	+	+	+	+	=	15	0,00	-	-	-	#
38	+	+	+	+	+	=	16	0,00	-	-	-	#
47	+	+	+	+	+	=	21	0,00	-	-	-	#
48	+	+	+	+	+	=	22	0,00	-	-	-	#

TVC (CFU/mL): 4 300

Lab. I

Code	Reference method ISO 11290-1					Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation OAA	Final result	
	O & A	Oxford	O & A	Oxford				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	3,35	+	+	+	=
30	+	+	+	+	+	=	4	3,35	+	+	+	=
31	+	+	+	+	+	=	11	3,32	+	+	+	=
32	+	+	+	+	+	=	12	3,23	+	+	+	=
39	+	+	+	+	+	=	17	3,14	+	+	+	=
40	+	+	+	+	+	=	18	3,17	+	+	+	=
45	+	+	+	+	+	=	23	3,13	+	+	+	=
46	+	+	+	+	+	=	24	3,08	+	+	+	=
25	+	+	+	+	+	=	1	3,26	+	+	+	=
26	+	+	+	+	+	=	2	3,35	+	+	+	=
33	+	+	+	+	+	=	7	3,24	+	+	+	=
34	+	+	+	+	+	=	8	3,28	+	+	+	=
37	+	+	+	+	+	=	15	3,31	+	+	+	=
38	+	+	+	+	+	=	16	2,61	+	+	+	=
47	+	+	+	+	+	=	21	3,28	+	+	+	=
48	+	+	+	+	+	=	22	3,21	+	+	+	=

TVC (CFU/mL): 1 600

Lab. J

Code	Reference method ISO 11290-1					Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation OAA	Final result	
	O & A	Oxford	O & A	Oxford				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	2,78	+	+	+	=
30	+	+	+	+	+	=	4	2,80	+	+	+	=
31	+	+	+	+	+	=	11	2,86	+	+	+	=
32	+	+	+	+	+	=	12	2,82	+	+	+	=
39	+	+	+	+	+	=	17	2,86	+	+	+	=
40	+	+	+	+	+	=	18	2,77	+	+	+	=
45	+	+	+	+	+	=	23	2,78	+	+	+	=
46	+	+	+	+	+	=	24	2,81	+	+	+	=
25	+	+	+	+	+	=	1	2,66	+	+	+	=
26	-	-	-	-	-	#	2	2,93	+	+	+	=
33	+	+	+	+	+	=	7	2,83	+	+	+	=
34	+	+	+	+	+	=	8	2,55	+	+	+	=
37	+	+	+	+	+	=	15	0,68	+	+	+	=
38	+	+	+	+	+	=	16	1,41	+	+	+	=
47	+	+	+	+	+	=	21	2,60	+	+	+	=
48	+	+	+	+	+	=	22	2,33	+	+	+	=

TVC (CFU/mL): 17000

Lab. K

Code	Méthode de référence ISO 11290-1					Comparaison / Résultat attendu	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation	Final result	
	O & A	2nd media	O & A	2nd media				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	3,06	+	+	+	=
30	+	+	+	+	+	=	4	2,99	+	+	+	=
31	+	+	+	+	+	=	11	2,97	+	+	+	=
32	+	+	+	+	+	=	12	2,92	+	+	+	=
39	+	+	+	+	+	=	17	3,01	+	+	+	=
40	+	+	+	+	+	=	18	2,94	+	+	+	=
45	+	+	+	+	+	=	23	3,04	+	+	+	=
46	+	+	+	+	+	=	24	2,85	+	+	+	=
25	-	-	-	-	-	#	1	3,07	+	+	+	=
26	+	+	+	+	+	=	2	2,89	+	+	+	=
33	+	+	+	+	+	=	7	2,96	+	+	+	=
34	+	+	+	+	+	=	8	2,18	+	+	+	=
37	+	+	+	+	+	=	15	3,13	+	+	+	=
38	+	+	+	+	+	=	16	1,59	+	+	+	=
47	+	+	+	+	+	=	21	2,35	+	+	+	=
48	+	+	+	+	+	=	22	0,00	-	-	-	#

TVC (CFU/mL): 2 000

Lab. L

Code	Reference method ISO 11290-1					Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation Rapid'Lmono	Final result	
	O & A	Oxford	O & A	Oxford				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	2,30	+	+	+	=
30	+	+	+	+	+	=	4	2,34	+	+	+	=
31	+	+	+	+	+	=	11	2,36	+	+	+	=
32	+	+	+	+	+	=	12	2,35	+	+	+	=
39	+	+	+	+	+	=	17	2,33	+	+	+	=
40	+	+	+	+	+	=	18	2,32	+	+	+	=
45	+	+	+	+	+	=	23	2,43	+	+	+	=
46	+	+	+	+	+	=	24	2,35	+	+	+	=
25	+	+	+	+	+	=	1	2,24	+	+	+	=
26	+	+	+	+	+	=	2	2,13	+	+	+	=
33	+	+	+	+	+	=	7	2,24	+	+	+	=
34	+	+	+	+	+	=	8	2,31	+	+	+	=
37	+	+	+	+	+	=	15	2,41	+	+	+	=
38	+	+	+	+	+	=	16	2,43	+	+	+	=
47	+	+	+	+	+	=	21	2,34	+	+	+	=
48	+	+	+	+	+	=	22	2,38	+	+	+	=

TVC (CFU/mL): 1 700

Lab. M

Code	Reference method ISO 11290-1					Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation OAA	Final result	
	O & A	Oxford	O & A	Oxford				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	3,55	+	+	+	=
30	+	+	+	+	+	=	4	3,49	+	+	+	=
31	+	+	+	+	+	=	11	3,67	+	+	+	=
32	+	+	+	+	+	=	12	3,59	+	+	+	=
39	+	+	+	+	+	=	17	3,54	+	+	+	=
40	+	+	+	+	+	=	18	3,48	+	+	+	=
45	+	+	+	+	+	=	23	3,49	+	+	+	=
46	+	+	+	+	+	=	24	3,52	+	+	+	=
25	+	+	+	+	+	=	1	2,04	+	+	+	=
26	+	+	+	+	+	=	2	2,00	+	+	+	=
33	+	+	+	+	+	=	7	2,68	+	+	+	=
34	+	+	+	+	+	=	8	2,12	+	+	+	=
37	+	+	+	+	+	=	15	0,21	+	+	+	=
38	+	+	+	+	+	=	16	2,61	+	+	+	=
47	+	+	+	+	+	=	21	1,90	+	+	+	=
48	+	+	+	+	+	=	22	2,54	+	+	+	=

TVC (CFU/mL):

Lab. N

Code	Méthode de référence ISO 11290-1					Comparaison / Résultat attendu	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation Rapid'Lmono et OAA	Final result	
	O & A	Rapid'Lmono	O & A	Rapid'Lmono				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	2,77	+	+	+	=
30	+	+	+	+	+	=	4	2,57	+	+	+	=
31	+	+	+	+	+	=	11	2,52	+	+	+	=
32	+	+	+	+	+	=	12	2,52	+	+	+	=
39	+	+	+	+	+	=	17	2,59	+	+	+	=
40	+	+	+	+	+	=	18	2,60	+	+	+	=
45	+	+	+	+	+	=	23	2,61	+	+	+	=
46	+	+	+	+	+	=	24	2,57	+	+	+	=
25	+	+	+	+	+	=	1	2,25	+	+	+	=
26	+	+	+	+	+	=	2	2,32	+	+	+	=
33	+	+	+	+	+	=	7	1,93	+	+	+	=
34	+	+	+	+	+	=	8	0,80	+	+	+	=
37	+	+	+	+	+	=	15	2,52	+	+	+	=
38	+	+	+	+	+	=	16	1,68	+	+	+	=
47	+	+	+	+	+	=	21	2,24	+	+	+	=
48	+	+	+	+	+	=	22	2,65	+	+	+	=

TVC (CFU/mL): 2 500

Lab. O

Code	Reference method ISO 11290-1					Comparison / expected result	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation Rapid'Lmono et OAA	Final result	
	O & A	Oxford	O & A	Oxford				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	2,61	+	+	+	=
30	+	+	+	+	+	=	4	2,65	+	+	+	=
31	+	+	+	+	+	=	11	2,58	+	+	+	=
32	+	+	+	+	+	=	12	2,56	+	+	+	=
39	+	+	+	+	+	=	17	2,54	+	+	+	=
40	+	+	+	+	+	=	18	2,51	+	+	+	=
45	+	+	+	+	+	=	23	2,48	+	+	+	=
46	+	+	+	+	+	=	24	2,54	+	+	+	=
25	+	+	+	+	+	=	1	2,58	+	+	+	=
26	+	+	+	+	+	=	2	0,55	+	+	+	=
33	+	+	+	+	+	=	7	2,53	+	+	+	=
34	+	+	+	+	+	=	8	2,54	+	+	+	=
37	+	+	+	+	+	=	15	2,56	+	+	+	=
38	+	+	+	+	+	=	16	2,59	+	+	+	=
47	+	+	+	+	+	=	21	2,89	+	+	+	=
48	+	+	+	+	+	=	22	0,00	-	-	-	#

TVC (CFU/mL): 20 000

Lab. P

Code	Méthode de référence ISO 11290-1					Comparaison / Résultat attendu	Code	Alternative method VIDAS LMX				Comparison / expected result
	half-Fraser		Fraser		Result			Test	Test result	Confirmation	Final result	
	O & A	2nd media	O & A	2nd media				TV				
27	-	-	-	-	-	=	5	0,00	-	-	-	=
28	-	-	-	-	-	=	6	0,00	-	-	-	=
35	-	-	-	-	-	=	9	0,00	-	-	-	=
36	-	-	-	-	-	=	10	0,00	-	-	-	=
41	-	-	-	-	-	=	13	0,00	-	-	-	=
42	-	-	-	-	-	=	14	0,00	-	-	-	=
43	-	-	-	-	-	=	19	0,00	-	-	-	=
44	-	-	-	-	-	=	20	0,00	-	-	-	=
29	+	+	+	+	+	=	3	3,21	+	+	+	=
30	+	+	+	+	+	=	4	3,22	+	+	+	=
31	+	+	+	+	+	=	11	3,34	+	+	+	=
32	+	+	+	+	+	=	12	3,39	+	+	+	=
39	+	+	+	+	+	=	17	3,46	+	+	+	=
40	+	+	+	+	+	=	18	3,31	+	+	+	=
45	+	+	+	+	+	=	23	3,31	+	+	+	=
46	+	+	+	+	+	=	24	3,31	+	+	+	=
25	+	+	+	+	+	=	1	1,34	+	+	+	=
26	+	+	+	+	+	=	2	0,50	+	+	+	=
33	+	+	+	+	+	=	7	0,68	+	+	+	=
34	+	+	+	+	+	=	8	0,96	+	+	+	=
37	+	+	+	+	+	=	15	0,35	+	+	+	=
38	+	+	+	+	+	=	16	0,55	+	+	+	=
47	+	+	+	+	+	=	21	0,69	+	+	+	=
48	+	+	+	+	+	=	22	0,16	+	+	+	=

TVC (CFU/mL): NC