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NF VALIDATION
Validation of alternative analytical methods
Application in food microbiology

Summary report

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

Thermo Scientific™ SureTect™ *E. coli* O157:H7 PCR Assay

(certificate number UNI 03/10 - 03/15)

for the detection of *Escherichia coli* O157:H7 in raw beef meats, vegetables and fruits

Qualitative method

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This report consists of 83 pages, including 7 appendices.

Only copies including the totality of this report are authorised.

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

Version 0
23 February 2023

Quality Assurance documents related to this study can be consulted upon request from **Thermo Fisher Scientific**.

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

Validation protocols	▪ EN ISO 16140-1 (June 2016): Microbiology of the food chain - Method validation - *Part 1: Vocabulary* ▪ EN ISO 16140-1 (June 2016): Microbiology of the food chain - Method validation - *Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method* ▪ AFNOR Technical Rules (PR Revision n° 7)
Reference methods♦	▪ ISO 16654 (May 2001): Microbiology of food and animal feeding stuffs - Horizontal method for the detection of *Escherichia coli* O157 ▪ ISO 16654 (May 2001): Microbiology of food and animal feeding stuffs - Horizontal method for the detection of *Escherichia coli* O157 - Amendment 1 (March 2017): annex B: result of inter-laboratory studies
Alternative method	**Thermo Scientific™ SureTect™ *E. coli* O157:H7 PCR Assay with the 7500 PCR and QS5 PCR instruments**
Scope	> **Raw beef meats (25 g test portion)** > **Vegetables and fruits (25 g test portion)**
Certification organism	AFNOR Certification (http://nf-validation.afnor.org/)

♦ Analyses performed according to the COFRAC accreditation

1 INTRODUCTION

The Thermo Scientific™ SureTect™ *Escherichia coli* O157:H7 PCR Assay was validated in 2015 (certificate number UNI 03/10 - 03/15). The different validations are described below:

March 2015	Initial validation for raw beef meats using the **Thermo Scientific PikoReal** Real-Time instrument with **SureTect software v1.2.**
January 2016	Extension study for the use of the **Applied Biosystems™ 7500 Fast** Real-Time PCR system with Applied Biosystem™ **RapidFinder™ Express 2.0 software**
November 2019	- Renewal study for raw beef meats using the **Applied Biosystems™ 7500 Fast** PCR instrument - Extension for vegetables and fruits using the **Applied Biosystems™ 7500 Fast** PCR instrument - Extension study for raw beef meats, fruits and vegetables using the **Applied Biosystems™ QuantStudio™ 5** Real-Time PCR Instrument **with the Thermo Scientific™ RapidFinder™ Analysis Software v1.0**
February 2023	Renewal study

2 METHOD PROTOCOLS

2.1 Alternative method

The flow diagram of the alternative method is provided in **Appendix 1**.

2.1.1 Principle

The PCR pellets used in the SureTect assays contain lyophilized (freeze-dried) target-specific primers, dye labeled probes and PCR master mix components. Probes are short oligonucleotides with a quencher molecule at one end that, when not bound to target DNA, greatly reduces fluorescence from the dye at the opposite end. The oligonucleotides target unique DNA sequences found only in the target micro-organism. If present, the target DNA will be amplified and the increasing fluorescent signal generated will be detected by the Real-Time PCR Instrument and interpreted by the software.

The SureTect assays are based on Solaris™ qPCR technology. The probes have a molecule called Minor Groove Binder (MGB) attached to one end, which enhances the probe-template DNA bond and yields a better signal-to-noise ratio by lowering background fluorescence. Results are achieved in around one hour and twenty minutes of loading the prepared sample in the Real-Time PCR instrument and are displayed on the PC screen as simple positive or negative symbols with amplification plots also easily accessible for review.

The SureTect *E. coli* O157:H7 PCR assay targets a unique DNA sequence that is specific to *E. coli* O157:H7. The SureTect PCR Assay includes all of the necessary reagents for bacterial DNA release and PCR. Enriched samples are simply pipetted into pre-filled Lysis Tubes, along with Proteinase K, before incubation to lyse any bacterial cells present in the sample and release their DNA into solution. The lysate is then loaded into the SureTect PCR Tubes to re-hydrate the PCR pellets which contain all of the necessary components and reagents for PCR, including a probe, primers and DNA template for the internal amplification control (IAC). The PCR Tubes are then sealed, loaded into the Real-Time PCR Instrument and the run started using the software. After running, interpreted results will be clearly displayed and can be reported, stored, printed off and downloaded as required.

2.1.2 Protocol

The protocol is the following:

- Enrichment step:
  - In pre-warmed (41.5°C ± 1°C) Buffered Peptone Water (BPW) for 8 - 24 h at 41.5°C ± 1°C for the raw beef meat category;
  - In BPW for 20 - 24 h at 41.5°C ± 1°C for the vegetables and fruits category.
- DNA extraction on 10 µl of enriched sample;
- PCR on 20 µl lysate;
- Confirmation: the positive results are confirmed by streaking 50 µl of enrichment broth onto CT-SMAC Agar and by performing latex tests on characteristic colonies with or without a purification step (for O157 latex test) and after a purification step (for H7 latex test). The following latex tests can be used: OXOID E. coli O157 latex test kit DR0620M, Remel RIM E. coli O157:H7 latex kit (R24250).
  If the results are not confirmed using these simple tests, an IMS is performed before streaking 50 µl onto CT-SMAC Agar.

In order to improve the practicability, it is possible to store the enrichment broths 72 h at 5°C ± 3°C prior to analysis with the SureTect™ *E. coli* O157:H7 PCR Assay.

2.1.3 Restrictions

There is no restriction.

2.2 Reference method◆

The reference method used is the following (See **Appendix 2**):

- ISO 16654 method (May 2001): Microbiology of food and animal feeding stuffs - Horizontal method for the detection of *Escherichia coli* O157.

- ISO 16654/A1 (March 2017): Microbiology of food and animal feeding stuffs - Horizontal method for the detection of *Escherichia coli* O157 - Amendment 1: annex B: result of inter-laboratory studies

2.3 Study design

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

3 INITIAL VALIDATION, RENEWAL AND EXTENSION STUDIES RESULTS

3.1 Method comparison study

The study was carried out on a diversity of samples and strains representative of agri-food products. This does not constitute an exhaustive list of the different matrices included in the scope.
For any comment on the alternative method, please contact AFNOR Certification at http://nf-validation.afnor.org/contact-2/.

3.1.1 Sensitivity study

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

◆ Analysis performed according to the COFRAC accreditation

3.1.1.1 Number and nature of samples

The distribution per tested category and type is given in Table 1 for the results observed with the 7500 Fast PCR instrument (extension: 2016 and 2019, and renewal: 2019) and in Table 2 for the results observed with the QS5 PCR instrument (extension: 2019).

For the 7500 Fast PCR instrument, taking into account the renewal and the extension studies, 130 samples were tested providing 61 positive samples and 69 negative samples.

For the extension using the QS5 PCR instrument, 129 samples were tested providing 62 or 63 positive samples or 67 or 66 negative samples depending of the raw beef meat category protocol (8h or 24 h).

Table 1 – Distribution per tested category and type - 7500 Fast PCR instrument

Category		Type		Positive samples	Negative samples	Total
1	Raw beef meat (8 h)	a	Fresh and frozen ground beef	10	11	21
		b	Seasoned beef	13	9	22
		c	Fresh and frozen beef trim	7	13	20
			Total	30	33	63
	Raw beef meat (24 h)	a	Fresh and frozen ground beef	10	11	21
		b	Seasoned beef	13	9	22
		c	Fresh and frozen beef trim	7	13	20
			Total	30	33	63
2	Vegetables and fruits (20h)	a	Sprouts	9	17	26
		b	Leafy greens and frozen vegetables	11	10	21
		c	Fruits and juices	11	9	20
			Total	31	36	67
All the categories (8 h for raw beef)				**61**	**69**	**130**
All the categories (24 h for raw beef)				**61**	**69**	**130**

Table 2 – Distribution per tested category and type - QS5 PCR instrument

Category		Type		Positive samples	Negative samples	Total
1	Raw beef meat (8 h)	a	Fresh and frozen ground beef	10	10	20
		b	Seasoned beef	12	10	22
		c	Fresh and frozen beef trim	9	11	20
			Total	31	31	62
	Raw beef meat (24 h)	a	Fresh and frozen ground beef	10	10	20
		b	Seasoned beef	12	10	22
		c	Fresh and frozen beef trim	10	10	20
			Total	32	30	62
2	Vegetables and fruits (20h)	a	Sprouts	9	17	26
		b	Leafy greens and frozen vegetables	11	10	21
		c	Fruits and juices	11	9	20
			Total	31	36	67
All the categories (8 h for raw beef)				**62**	**67**	**129**
All the categories (24 h for raw beef)				**63**	**66**	**129**

3.1.1.2 Artificial contamination of samples

Artificial contaminations were done by seeding. The artificial contaminations are presented in **Appendix 3**.

For the 7500 Fast PCR instrument, 85 samples were artificially contaminated, using 26 different strains. 61 gave a positive result.

For the QS5 PCR instrument, 90 samples were artificially contaminated, using 31 different strains. 63 gave a positive result.
The repartition of the positive samples per inoculation protocol and inoculation level is given in Table 3.

Table 3 - Repartition of the positive samples per inoculation protocol and inoculation level

PCR instrument		Naturally contaminated	Seeding protocol			Total
			≤ 3 CFU	3 < x ≤ 10 CFU	10<x<30 CFU	
7500 Fast	Number	0	48	13	0	61
	%	0,0%	78,7%	21,3%	0,0%	100,0%
QS5	Number	0	50	13	0	63
	%	0,0%	79,4%	20,6%	0,0%	100,0%

The inoculation levels were increased due to the low number of positive sprouts samples obtained (20 sprouts inoculated below 3 CFU/test portion, only 4 positive

samples obtained; 6 sprouts inoculated between 3 and 10 CFU/test portion, 5 positive results obtained).

100 % of the samples were artificially contaminated for both PCR instruments (7500 Fast and QS5).

3.1.2 Protocol applied during the validation study

> *Incubation times*

The following incubation times were tested:

- Raw beef meats category: 8 h and 24h;
- Vegetables: 20 h.

> *Confirmation protocols*

The positive results were confirmed by:

- Streaking 50 µl of enrichment broth onto CT-SMAC Agar:
  - Typical colonies are confirmed by O157 latex tests (with or without purification step) and H7 latex tests (after purification step);
  - Two latex tests were used for the initial and extension validation studies: OXOID E. coli O157 latex test kit DR0620M and Wellcolex E. coli O157:H7 R30959601. This latex test was no more available for the study performed in 2019, the Remel RIM E. coli O157:H7 latex kit (R24250) was tested for the renewal and extension studies.
- Performing an IMS step prior streaking in case of the confirmation is negative using the direct streaking procedure.

For samples not confirmed by direct streaking or IMS, the protocol recommended in the kit insert on page 23 was applied. This protocol consists in performing a dilution series from the immunobeads suspension, and plate 50 µl of each dilution onto CT-SMAC plates.
For samples in negative agreement, an IMS step was performed as described in the ISO 16654 method.

> ***Enrichment broth storage***

The enrichment broths of positive and discordant samples were stored for 72 h at 5°C ± 3°C. For Raw beef meat category, after 8 h incubation time, an aliquot was kept for 72 h at 5°C ± 3°C and the Stomacher bag was incubated until 24 h.

3.1.2.1 Test results

Raw data per category are given in **Appendix 4**. The results are given in Table 4 (7500 Fast PCR instrument) and Table 5 (QS5 PCR instrument).

Table 4 – Interpretation of sample results between the reference and alternative method (based on the confirmed alternative)

7500 Fast PCR instrument

Category		PA	NA	PD	ND	PPND	PPNA	Total
1	Raw beef meat (8 h)	26	33	1	3	0	0	**63**
	Raw beef meat (24 h)	26	33	1	3	0	0	**63**
2	Vegetables and fruits (20 h)	13	31	10	6	2	5	**67**
All the categories (8 h for raw beef)		**39**	**64**	**11**	**9**	**2**	**5**	**130**
All the categories (24 h for raw beef)		**39**	**64**	**11**	**9**	**2**	**5**	**130**

Table 5 – Interpretation of sample results between the reference and alternative method (based on the confirmed alternative)

QS5 PCR instrument

Category		PA	NA	PD	ND	PPND	PPNA	Total
1	Raw beef meat (8 h)	19	31	5	7	0	0	**62**
	Raw beef meat (24 h)	19	30	6	7	0	0	**62**
2	Vegetables and fruits (20 h)	13	31	10	6	2	5	**67**
All the categories (8 h for raw beef)		**32**	**62**	**15**	**13**	**2**	**5**	**129**
All the categories (24 h for raw beef)		**32**	**61**	**16**	**13**	**2**	**5**	**129**

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

The calculations are presented in Table 6 (7500 Fast PCR instrument) and Table 7 (QS5 PCR instrument).

Table 6 – Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) – 7500 Fast PCR instrument

Category		Type		PA	NA*	PD	ND**	PPND	PPNA	SE alt %	SE ref %	RT %	FPR %
1	Raw beef meat (8 h)	a	Fresh and frozen ground beef	9	11	0	1	0	0	90,0	100,0	95,2	0,0
		b	Seasoned beef	12	9	1	0	0	0	100,0	92,3	95,5	0,0
		c	Fresh and frozen beef trim	5	13	0	2	0	0	71,4	100,0	90,0	0,0
			Total	26	33	1	3	0	0	90,0	96,7	93,7	0,0
	Raw beef meat (24 h)	a	Fresh and frozen ground beef	9	11	0	1	0	0	90,0	100,0	95,2	0,0
		b	Seasoned beef	12	9	1	0	0	0	100,0	92,3	95,5	0,0
		c	Fresh and frozen beef trim	5	13	0	2	0	0	71,4	100,0	90,0	0,0
			Total	26	33	1	3	0	0	90,0	96,7	93,7	0,0
2	Vegetables and fruits (20h)	a	Sprouts	2	12	2	3	2	5	44,4	77,8	73,1	41,2
		b	Leafy greens and frozen vegetables	4	10	5	2	0	0	81,8	54,5	66,7	0,0
		c	Fruits and juices	7	9	3	1	0	0	90,9	72,7	80,0	0,0
			Total	13	31	10	6	2	5	74,2	67,7	73,1	19,4
All the categories (8h for raw beef)				**39**	**64**	**11**	**9**	**2**	**5**	**82,0**	**82,0**	**83,1**	**10,1**
All the categories (24h for raw beef)				**39**	**64**	**11**	**9**	**2**	**5**	**82,0**	**82,0**	**83,1**	**10,1**

Table 7 – Calculation of the relative trueness (RT), the sensitivity (SE) and the false positive ratio (FPR) – QS5 PCR instrument

Category		Type		PA	NA*	PD	ND**	PPND	PPNA	SE alt %	SE ref %	RT %	FPR %
1	Raw beef meat (8 h)	a	Fresh and frozen ground beef	4	10	3	3	0	0	70,0	70,0	70,0	0,0
		b	Seasoned beef	9	10	2	1	0	0	91,7	83,3	86,4	0,0
		c	Fresh and frozen beef trim	6	11	0	3	0	0	66,7	100,0	85,0	0,0
			Total	19	31	5	7	0	0	77,4	83,9	80,6	0,0
	Raw beef meat (24 h)	a	Fresh and frozen ground beef	4	10	3	3	0	0	70,0	70,0	70,0	0,0
		b	Seasoned beef	9	10	2	1	0	0	91,7	83,3	86,4	0,0
		c	Fresh and frozen beef trim	6	10	1	3	0	0	70,0	90,0	80,0	0,0
			Total	19	30	6	7	0	0	78,1	81,3	79,0	0,0
2	Vegetables and fruits (20h)	a	Sprouts	2	12	2	3	2	5	44,4	77,8	73,1	41,2
		b	Leafy greens and frozen vegetables	4	10	5	2	0	0	81,8	54,5	66,7	0,0
		c	Fruits and juices	7	9	3	1	0	0	90,9	72,7	80,0	0,0
			Total	13	31	10	6	2	5	74,2	67,7	73,1	19,4
All the categories (8 h for raw beef)				**32**	**62**	**15**	**13**	**2**	**5**	**75,8**	**75,8**	**76,7**	**10,4**
All the categories (24 h for raw beef)				**32**	**61**	**16**	**13**	**2**	**5**	**76,2**	**74,6**	**76,0**	**10,6**

* PPNA not included ** PPND not included

A summary of the results is given in Table 8.

Table 8 – Summary of results

		7500 Fast PCR instrument 8h and 24h	QS5 PCR instrument	
			8 h (raw beef)	24 h (raw beef)
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA+PD)}{(PA+ND+PD)} \times 100\%$	82.0 %	75.8 %	76.2 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA+ND)}{(PA+ND+PD)} \ x\ 100\ \%$	82.0 %	75.8 %	74.6 %
Relative trueness	$RT = \frac{(PA+NA)}{N} \times 100\%$	83.1 %	76.7 %	76.0 %
False positive ratio for the alternative method* FP = PPNA + PPND	$FPR = \frac{(FP)}{NA} \times 100\%$	10.1 %	10.4 %	10.6 %

With *ND = ND + PPND*
NA = NA + PPNA

3.1.2.3 Analysis of discordant results

The negative deviations are given in Table 9 (7500 Fast PCR instrument) and Table 10 (QS5 PCR instrument) and the positive deviations in Table 11 (7500 Fast PCR instrument) and Table 12 (QS5 PCR instrument).

(1) protocol recommended in the IFU on page 23

Table 9 – Negative deviations – 7500 Fast PCR instrument

Date	N° Sample	Product	Artificial contaminations		ISO 16654♦ method	SureTect *E. coli*O157:H7 method								Category	Type
						BPW pre-warmed 8-24h 41,5°C									
						Incubation time 8h				Incubation time 24h					
			Strain	Inoculation Level CFU/sample	Final Result	PCR 7500 Fast (target1/target2) Result	Confirmation	Final result 8h	Agreement Ref/Alt	PCR 7500 Fast (target1/target2) Result	Confirmation	Final result 24h	Agreement Ref/Alt		
2016	**4858**	**Frozen ground beef**	*E. coli* O157:H7 Ad976	3,2	+	-(31,21/)	-	-	**ND**	+(22,24/)	-	-	**ND**	1	a
2016	**4584**	**Beef trim**	*E. coli* O157:H7 Ad684	2,0	+	-/-	-	-	**ND**	-/-	-	-	**ND**	1	c
2016	**4588**	**Beef trim**	*E. coli* O157:H7 Ad924	2,8	+	-/-	-	-	**ND**	-/-	-	-	**ND**	1	c

Date	N° Sample	Product	Artificial contaminations		ISO 16654♦ method	SureTect *E. coli* O157:H7 method				Category	Type
						BPW 20h 41,5°C					
			Strain	Inoculation Level CFU/sample	Final Result	PCR 7500 Fast (target1/target2) Result	Confirmation	Final result	Agreement Ref/Alt		
2019	**4194**	**Sprouts (alfalfa, lentils, fennel)**	*E. coli* O157:H7 Ad579	2,4	+	+(28,76)/-	-	-	**ND**	2	a
2019	**4507**	**Sprouts (radish)**	*E. coli* O157:H7 EF190	1,4	+	-/-	-	-	**ND**	2	a
2019	**4509**	**Sprouts (alfalfa, lentils, leeks)**	*E. coli* O157:H7 Ad575	2,2	+	-/-	-	-	**ND**	2	a
2019	**5799**	**Sprouts(alfalfa)**	*E. coli* O157:H7 Ad572	6,4	+	+(35,01)/+(36,80)	-(1)	-	**PPND**	2	a
2019	**5802**	**Sprouts(alfalfa)**	*E. coli* O157:H7 Ad581	3,6	+	+(33,31)/+(34,61)	-(1)	-	**PPND**	2	a
2019	**3308**	**Frozen green beans**	*E. coli* O157:H7 Ad556	2,8	+	-/-	-	-	**ND**	2	b
2019	**5805**	**Leafy greens (cress)**	*E. coli* O157:H7 Ad581	1,8	+	-/-	-	-	**ND**	2	b
2019	**4207**	**Cut pineapple**	*E. coli* O157:H7 Ad580	3,0	+	-/-	-	-	**ND**	2	c

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Table 10 – Negative deviations – QS5 PCR instrument

Date	N° Sample	Product	Artificial contaminations (spiking protocol)		ISO 16654♦ method	SureTect *E. coli* O157:H7 method								Category	Type
						BPW pre-warmed 8-24h 41,5°C									
						Incubation time 8h				Incubation time 24h					
			Strain	Inoculation Level CFU/sample	Final Result	PCR QS5 (target1/target2) Result	Confirmation	Final result 8h	Agreement Ref/Alt	PCR QS5 (target1/target2) Result	Confirmation	Final result 24h	Agreement Ref/Alt		
2019	**3314**	**Ground beef**	*E. coli* O157:H7 1043	2,2	+	-/-	-	-	**ND**	-/-	-	-	**ND**	1	a
2019	**3320**	**Beef trim**	*E. coli* O157:H7 1211-1	1,8	+	-/-	-	-	**ND**	-/-	-	-	**ND**	1	c
2019	**3323**	**Seasoned beef trim**	*E. coli* O157:H7 Ad2222	2,0	+	-/-	-	-	**ND**	-/-	-	-	**ND**	1	b
2019	**3297**	**Frozen ground beef**	*E. coli* O157:H7 Ad489	1,2	+	-/-	-	-	**ND**	-/-	-	-	**ND**	1	a
2019	**3298**	**Frozen ground beef**	*E. coli* O157:H7 Ad1501	1,8	+	-/-	-	-	**ND**	-/-	-	-	**ND**	1	a
2019	**4499**	**Beef trim**	*E. coli* O157:H7 Ad976	0,8	+	-/-	-	-	**ND**	-/-	-	-	**ND**	1	c
2019	**4501**	**Beef trim**	*E. coli* O157:H7 Ad1071	0,6	+	-/+(49,14)	-	-	**ND**	-/-	-	-	**ND**	1	c

Date	N° Sample	Product	Artificial contaminations		ISO 16654♦ method	SureTect *E. coli* O157:H7 method				Category	Type
						BPW 20h 41,5°C					
			Strain	Inoculation Level CFU/sample	Final Result	PCR QS5 (target1/target2) Result	Confirmation	Final result	Agreement Ref/Alt		
2019	**3308**	**Frozen green beans**	*E. coli* O157:H7 Ad556	2,8	+	-/-	-	-	**ND**	2	b
2019	**4194**	**Sprouts (alfalfa, lentils, fennel)**	*E. coli* O157:H7 Ad579	2,4	+	+(30,97)/-	-	-	**ND**	2	a
2019	**4207**	**Cut pineapple**	*E. coli* O157:H7 Ad580	3,0	+	-/-	-	-	**ND**	2	c
2019	**4507**	**Sprouts (radish)**	*E. coli* O157:H7 EF190	1,4	+	-/-	-	-	**ND**	2	a
2019	**4509**	**Sprouts (alfalfa, lentils, leeks)**	*E. coli* O157:H7 Ad575	2,2	+	-/-	-	-	**ND**	2	a
2019	**5799**	**Sprouts(alfalfa)**	*E. coli* O157:H7 Ad572	6,4	+	+(36,68)/+(38,29)	-(1)	-	**PPND**	2	a
2019	**5802**	**Sprouts(alfalfa)**	*E. coli* O157:H7 Ad581	3,6	+	+(33,36)/+(34,50)	-(1)	-	**PPND**	2	a
2019	**5805**	**Leafy greens (cress)**	*E. coli* O157:H7 Ad581	1,8	+	-/-	-	-	**ND**	2	b

♦ Analyses performed according to the COFRAC accreditation

Table 11 – Positive deviations – 7500 Fast PCR instrument

Date	N° Sample	Product	Artificial contaminations		ISO 16654♦ method	SureTect *E. coli* O157:H7 method								Category	Type
						BPW pre-warmed 8-24h 41,5°C									
						Incubation time 8h				Incubation time 24h					
			Strain	Inoculation Level CFU/sample	Final Result	PCR 7500 Fast (target1/target2) Result	Confirmation	Final result 8h	Agreement Ref/Alt	PCR 7500Fast (target1/target2) Result	Confirmation	Final result 24h	Agreement Ref/Alt		
2016	**4596**	**Carpaccio cheese**	*E. coli* O157:H7 Ad684	2,0	-	+(29,18/29,99)	+	+	**PD**	+(21,88/22,80)	+	+	**PD**	1	b

Date	N° Sample	Product	Artificial contaminations		ISO 16654♦ method	SureTect *E. coli* O157:H7 method				Category	Type
						BPW 20h 41,5°C					
			Strain	Inoculation Level CFU/sample	Final Result	PCR 7500Fast (target1/target2) Result	Confirmation	Final result	Agreement Ref/Alt		
2019	**3307**	**Frozen peas**	*E. coli* O157:H7 Ad571	7,4	-	+(23,08)/+(23,01)	+	+	**PD**	2	b
2019	**3309**	**Frozen green beans**	*E. coli* O157:H7 Ad571	7,4	-	+(20,08)/+(19,64)	+	+	**PD**	2	b
2019	**4190**	**Sprouts (alfalfa)**	*E. coli* O157:H7 Ad582	3,0	-	+(38,31)/+(37,33)	+(1)	+	**PD**	2	a
2019	**4197**	**Leafy greens (parsley)**	*E. coli* O157:H7 Ad557	1,6	-	+(28,41)/+(28,47)	+	+	**PD**	2	b
2019	**4198**	**Leafy greens (sorrel)**	*E. coli* O157:H7 Ad558	2,8	-	+(23,02)/+(22,82)	+	+	**PD**	2	b
2019	**4199**	**Leafy greens (sorrel)**	*E. coli* O157:H7 Ad574	2,6	-	+(23,18)/+(22,73)	+	+	**PD**	2	b
2019	**4200**	**Orange juice**	*E. coli* O157:H7 Ad579	2,4	-	+(20,63)/+(20,32)	+	+	**PD**	2	c
2019	**4201**	**Mango juice**	*E. coli* O157:H7 Ad580	3,0	-	+(21,58)/+(21,38)	+	+	**PD**	2	c
2019	**4514**	**Cut mango**	*E. coli* O157:H7 Ad576	1,6	-	+(40,29)/+(35,27)	+	+	**PD**	2	c
2019	**5801**	**Sprouts (alfalfa, lentils, leeks)**	*E. coli* O157:H7 Ad581	3,6	-	+(32,00)/+(34,98)	+(1)	+	**PD**	2	a

♦ Analyses performed according to the COFRAC accreditation

Table 12 – Positive deviations – QS5 PCR instrument

Date	N° Sample	Product	Artificial contaminations		ISO 16654♦ method	SureTect *E. coli* O157:H7 method								Category	Type
						BPW pre-warmed 8-24h 41,5°C									
						Incubation time 8h				Incubation time 24h					
			Strain	Inoculation Level CFU/sample	Final Result	PCR QS5 (target1/target2) Result	Confirmation	Final result 8h	Agreement Ref/Alt	PCR QS5(target1/target2) Result	Confirmation	Final result 24h	Agreement Ref/Alt		
2019	**3312**	**Ground beef**	*E. coli* O157:H7 Ad581	1,4	-	+(31,55/31,71)	+	+	**PD**	+(24,28/24,64)	+	+	**PD**	1	a
2019	**3318**	**Beef trim**	*E. coli* O157:H7 Ad2222	2,0	-	-/-	-	-	**NA**	+(34,53/34,52)	+	+	**PD**	1	c
2019	**3293**	**Frozen seasoned ground beef**	*E. coli* O157:H7 Ad488	1,4	-	+(28,52)/+(29,11)	+	+	**PD**	+(25,79)/+(26,97)	+	+	**PD**	1	b
2019	**3295**	**Frozen seasoned ground beef**	*E. coli* O157:H7 Ad1501	1,8	-	+(29,05)/+(28,99)	+	+	**PD**	+(25,93)/+(25,95)	+	+	**PD**	1	b
2019	**3300**	**Frozen ground beef**	*E. coli* O157:H7 Ad489	1,2	-	+(37,90)/+(36,41)	+	+	**PD**	+(29,86)/+(30,31)	+	+	**PD**	1	a
2019	**4498**	**Ground beef**	*E. coli* O157:H7 Ad1071	0,6	-	+(22,97)/+(23,84)	+	+	**PD**	+(21,81)/+(23,12)	+	+	**PD**	1	a

Date	N° Sample	Product	Artificial contaminations		ISO 16654 method	SureTect *E. coli* O157:H7 method				Category	Type
						BPW 20h 41,5°C					
			Strain	Inoculation Level CFU/sample	Final Result	PCR QS5 Fast (target1/target2) Result	Confirmation	Final result	Agreement Ref/Alt		
2019	**3307**	**Frozen peas**	*E. coli* O157:H7 Ad571	7,4	-	+(23,46)/+(23,48)	+	+	**PD**	2	b
2019	**3309**	**Frozen green beans**	*E. coli* O157:H7 Ad571	7,4	-	+(19,64)/+(19,95)	+	+	**PD**	2	b
2019	**4190**	**Sprouts (alfalfa)**	*E. coli* O157:H7 Ad582	3,0	-	+(36,37)/+(38,56)	+(1)	+	**PD**	2	a
2019	**4197**	**Leafy greens (parsley)**	*E. coli* O157:H7 Ad557	1,6	-	+(31,35)/+(31,83)	+	+	**PD**	2	b
2019	**4198**	**Leafy greens (sorrel)**	*E. coli* O157:H7 Ad558	2,8	-	+(23,79)/+(23,96)	+	+	**PD**	2	b
2019	**4199**	**Leafy greens (sorrel)**	*E. coli* O157:H7 Ad574	2,6	-	+(24,73)/+(24,71)	+	+	**PD**	2	b
2019	**4200**	**Orange juice**	*E. coli* O157:H7 Ad579	2,4	-	+(23,02)/+(23,04)	+	+	**PD**	2	c
2019	**4201**	**Mango juice**	*E. coli* O157:H7 Ad580	3,0	-	+(22,08)/+(22,00)	+	+	**PD**	2	c
2019	**4514**	**Cut mango**	*E. coli* O157:H7 Ad576	1,6	-	+(34,56)/+(33,80)	+	+	**PD**	2	c
2019	**5801**	**Sprouts (alfalfa, lentils, leeks)**	*E. coli* O157:H7 Ad581	3,6	-	+(32,23)/+(36,04)	+(1)	+	**PD**	2	a

The analyses of discordant results according to the EN ISO 16140-2:2016 is the following (See Table 13 for the 7500 Fast PCR Instrument and Table 14 fort the QS5 PCR instrument):

Table 13 – Analyses of discordant results – 7500 Fast PCR instrument

Category		Type		N+	ND	PPND	PD	Unpaired (ND+PPND)-PD	AL
1	Raw beef meat (8 h)	a	Fresh and frozen ground beef	10	1	0	0	1	
		b	Seasoned beef	13	0	0	1	-1	
		c	Fresh and frozen beef trim	7	2	0	0	2	
			Total	30	3	0	1	2	3
	Raw beef meat (24 h)	a	Fresh and frozen ground beef	10	1	0	0	1	
		b	Seasoned beef	13	0	0	1	-1	
		c	Fresh and frozen beef trim	7	2	0	0	2	
			Total	30	3	0	1	2	3
2	Vegetables and fruits	a	Sprouts	9	3	2	2	3	
		b	Leafy greens and frozen vegetables	11	2	0	5	-3	
		c	Fruits and juices	11	1	0	3	-2	
			Total	31	6	2	10	-2	3
All the categories (8 h for raw beef)				**61**	**9**	**2**	**11**	**0**	**4**
All the categories (24 h for raw beef)				**61**	**9**	**2**	**11**	**0**	**4**

Table 14 – Analyses of discordant results – QS5 PCR instrument

Category		Type		N+	ND	PPND	PD	Unpaired (ND+PPND)-PD	AL
1	Raw beef meat (8 h)	a	Fresh and frozen ground beef	10	3	0	3	0	
		b	Seasoned beef	12	1	0	2	-1	
		c	Fresh and frozen beef trim	9	3	0	0	3	
			Total	31	7	0	5	2	3
	Raw beef meat (24 h)	a	Fresh and frozen ground beef	10	3	0	3	0	
		b	Seasoned beef	12	1	0	2	-1	
		c	Fresh and frozen beef trim	10	3	0	1	2	
			Total	32	7	0	6	1	3
2	Vegetables and fruits	a	Sprouts	9	3	2	2	3	
		b	Leafy greens and frozen vegetables	11	2	0	5	-3	
		c	Fruits and juices	11	1	0	3	-2	
			Total	31	6	2	10	-2	3
All the categories (8 h for raw beef)				**62**	**13**	**2**	**15**	**0**	**4**
All the categories (24 h for raw beef)				**63**	**13**	**2**	**16**	**-1**	**4**

> **Negative deviations**

11 and 15 negative deviations were observed respectively for the 7500 Fast and the QS5 PCR instrument:

- 9 samples using the 7500 Fast PCR instrument and 13 samples using the QS5 PCR instrument gave negative PCR result and were not confirmed using the culture method. The negative deviations were probably linked to the unpaired study design and the heterogeneity of the samples

- 2 samples for both PCR instruments: 5799 (sprouts) and 5802 (sprouts) returned a PCR positive result, however the results could not be confirmed using culture methods. Note that for these samples, it was impossible to confirm the presence of *E. coli* O157:H7 in the enrichment broth even when applying the alternative protocol described in the kit insert.

Samples in negative agreement were not confirmed by applying the ISO 16654 protocol.

> **Positive deviations**

For the 7500 Fast PCR instrument, 11 positive deviations were observed.

For the QS5 PCR instrument, 15 or 16 positive deviations were observed depending on the incubation time applied for the raw beef meat category (8 h or 24 h).

The observed values for ((ND+ PPND) – PD) meet the acceptability limit for each individual category and for the two combined categories (calculated values ≤ AL) whatever the incubation time applied for the raw beef meat category for both PCR instruments (7500 Fast and QS5).

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

For the 7500 Fast PCR instrument, one change was observed and for the QS5 PCR instrument, two changes (See Tables 15 and 16).

Table 15 – Enrichment broth storage – 7500 Fast PCR instrument

Date	N° Sample	Product (French name)	Product	SureTect *E .coli* O157:H7 method	
				BPW 20h 41.5°C	After storage
2019	**4514**	**Mangue découpée**	**Cutted mango**	**PD**	**PPNA**

Table 16 – Enrichment broth storage – QS5 PCR instrument

Date	N° Sample	Product (French name)	Product	SureTect *E. coli* O157:H7 method			
				BPW 8h 41.5°C	BPW 24h 41.5°C	BPW 8h 41,5°C after storage	BPW 24h* 41,5°C after storage
2019	**3301**	**Pavé de rumsteak surgelé**	**Frozen beef trim**	**PA**	**PA**	**ND**	**PA**

Date	N° Sample	Product (French name)	Product	SureTect *E. coli* O157:H7 method	
				BPW 20h 41.5°C	After storage
2019	**4514**	**Mangue découpée**	**Cutted mango**	**PD**	**NA**

The analyses of discordant become (See Table 17 for the 7500 Fast PCR instrument and Table 18 for the QS5 PCR instrument).

/Table 17 - Analysis of discordant after storage 72 h at 5 ± 3°C - 7500 Fast PCR instrument

Category			Type	N+	ND	PPND	PD	Unpaired (ND+PPND)-PD	AL
1	Raw beef meat (8 h)	a	Fresh and frozen ground beef	10	1	0	0	1	
		b	Seasoned beef	13	0	0	1	-1	
		c	Fresh and frozen beef trim	7	2	0	0	2	
			Total	30	3	0	1	2	3
	Raw beef meat (24 h)	a	Fresh and frozen ground beef	10	1	0	0	1	
		b	Seasoned beef	13	0	0	1	-1	
		c	Fresh and frozen beef trim	7	2	0	0	2	
			Total	30	3	0	1	2	3
2	Vegetables and fruits (20h)	a	Sprouts	9	3	2	2	3	
		b	Leafy greens and frozen vegetables	11	2	0	5	-3	
		c	Fruits and juices	10	1	0	2	-1	
			Total	30	6	2	9	-1	3
All the categories (8 h for raw beef)				**60**	**9**	**2**	**10**	**1**	**4**
All the categories (24 h for raw beef)				**60**	**9**	**2**	**10**	**1**	**4**

Table 18 - Analysis of discordant after storage 72 h at 5 ± 3°C - QS5 PCR instrument

Category			Type	N+	ND	PPND	PD	Unpaired (ND+PPND)-PD	AL
1	Raw beef meat (8h)	a	Fresh and frozen ground beef	10	3	0	3	0	
		b	Seasoned beef	12	1	0	2	-1	
		c	Fresh and frozen beef trim	9	4	0	0	4	
			Total	31	8	0	5	3	3
	Raw beef meat (24h)	a	Fresh and frozen ground beef	10	3	0	3	0	
		b	Seasoned beef	12	1	0	2	-1	
		c	Fresh and frozen beef trim	10	3	0	1	2	
			Total	32	7	0	6	1	3
2	Vegetables and fruits (20h)	a	Sprouts	9	3	2	2	3	
		b	Leafy greens and frozen vegetables	11	2	0	5	-3	
		c	Fruits and juices	10	1	0	2	-1	
			Total	30	6	2	9	-1	3
All the categories (8 h for raw beef)				**61**	**14**	**2**	**14**	**2**	**4**
All the categories (24 h for raw beef)				**62**	**13**	**2**	**15**	**0**	**4**

The observed values for ((ND+ PPND) – PD) meet the acceptability limit for each individual category and for the two combined categories (calculated values ≤ AL) whatever the incubation time applied for the raw beef meat category for both PCR instruments (7500 Fast and QS5).

3.1.2.5 Confirmation

Direct streaking onto CT-SMAC was tested during the studies. No additional positive confirmation was obtained after performing an IMS step prior streaking onto CT-SMAC.

For 11 sprout samples giving a positive PCR result, a protocol recommended in the kit insert on page 23 was applied as direct streaking and IMS conducted to negative confirmation results. This protocol consists in performing a dilution series from the IMS beads, and plate 50 µl of each dilution onto CT-SMAC plates.4 samples (4190, 5798, 5800, 5801) were confirmed with this protocol.

3.1.2.6 PCR inhibition

For the 7500 Fast PCR instrument, inhibitions were observed for 2 samples:

- Sample 5798 (sprouts): a 1/5 dilution of the enrichment was performed before lysis step; the PCR was still inhibited. A new extraction without applying any dilution was required to obtain a PCR result (positive);
- Sample 5804 (leafy greens): a 1/5 dilution of the enrichment prior extraction was applied, and a negative PCR result was obtained.

For the QS5 PCR instrument, no inhibition was observed.

3.1.3 Relative level of detection

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

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

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

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

3.1.3.1 Experimental design

For the initial validation study, one matrix/strain pair (raw beef meat inoculated with *Escherichia coli* O157:H7 Ad933) was tested with the 7500 Fast PCR instrument using the following protocol:

- 0 CFU/g with 5 replicates;
- A low contamination level providing fractional recovery data, with 20 replicates;
- A higher contamination level, with 5 replicates.

For this extension study, two matrix/strain pairs were tested using the same protocol (See Table 19).

Table 19 - Matrix/strain pairs to be tested

Category	Matrix	Inoculated strain	Origin	Storage conditions before analysis	PCR instrument tested
Raw beef meats	Ground beef	*E. coli* O157:H7 Ad933	Ground beef	48 h at 3°C ± 2°C	QS5
Vegetables and fruits	Baby leaves	*E. coli* O157:H7 Ad2986	Baby leaves	48 h at 3°C ± 2°C	7500 Fast QS5

3.1.3.2 Calculation and interpretation of the RLOD

The raw data are given in **Appendix 5**.

The RLOD calculations were performed using the Excel spreadsheet available at http://standards.iso.org/iso/16140 - RLOD (clause 5-1-4-2 Calculation and interpretation of RLOD) version 15.08.2015. The RLOD are given in Table 20 for the 7500 Fast PCR instrument and Table 21 for the QS5 PCR instrument.

Table 20 – Presentation of RLOD before and after confirmation of the alternative method results - 7500 Fast PCR instrument

Matrix/strain pair	AL	RLOD	RLODL	RLODU	b=ln(RLOD)	sd(b)	z-Test statistic	p-value
Beef trim/*E. coli* O157:H7 Ad933 **(8 h)**	2,5	1,151	0,519	2,553	0,141	0,398	0,354	0,723
Beef trim/*E. coli* O157:H7 Ad933 **(24 h)**		1,000	0,478	2,092	0,000	0,369	0,000	1,000
Baby leaves/*E. coli* O157:H7 Ad2986 (20h)		0,756	0,314	1,823	-0,279	0,440	0,635	1,474
Combined	/	**0,955**	**0,598**	**1,526**	**-0,046**	**0,234**	**0,195**	**1,155**

Table 21 – Presentation of RLOD before and after confirmation of the alternative method results - QS5 PCR instrument

Matrix/strain pair	AL	RLOD	RLODL	RLODU	b=ln(RLOD)	sd(b)	z-Test statistic	p-value
Ground beef/*E. coli* O157:H7 Ad933 **(8 h)**	2,5	1,095	0,498	2,404	0,090	0,393	0,230	0,818
Ground beef/*E. coli* O157:H7 Ad933 **(24 h)**		1,095	0,498	2,404	0,090	0,393	0,230	0,818
Baby leaves/*E. coli* O157:H7 Ad2986 (20h)		0,660	0,277	1,573	-0,415	0,434	0,957	1,661
Combined	/	**0,964**	**0,612**	**1,518**	**-0,037**	**0,227**	**0,162**	**1,129**

The $LOD_{50\,\%}$ calculations according to Wilrich & Wilrich POD-LOD calculation program - version 11, 2022-10-12 test are given in Table 22 for the 7500 Fast PCR instrument and Table 23 for the QS5 PCR instrument.

Table 22 - LOD_{50} results - 7500 Fast PCR instrument

Category	(Strain / matrix) pair	Level of detection at 50% (CFU / sample size) according to Wilrich & Wilrich[1]	
		Reference method	Alternative method
1	Beef trim/ *E. coli* O157:H7 Ad933 - **8 h**	0.5 [0.3; 0.9]	0.6 [0.4; 1.0]
	Beef trim/ *E. coli* O157:H7 Ad933 - **24 h**	0.5 [0.3; 0.9]	0.6 [0.4; 1.0]
2	Baby leaves/ *E. coli* O157:H7 Ad2986 – 20h	2.8 [1.6; 4.9]	2.3 [1.3; 3.8]

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

Table 23 - LOD_{50} results - QS5 PCR instrument

Category	(Strain / matrix) pair	Level of detection at 50% (CFU / sample size) according to Wilrich & Wilrich	
		Reference method	Alternative method
1	Beef trim/ *E. coli* O157:H7 Ad933 - **8 h**	0.5 [0.3; 0.9]	0.6 [0.3; 1.0]
	Beef trim/ *E. coli* O157:H7 Ad933 - **24 h**	0.5 [0.3; 0.9]	0.6 [0.3; 1.0]
2	Baby leaves/ *E. coli* O157:H7 Ad2986- 20h	2.8 [1.6; 4.9]	2.0 [1.2; 3.4]

The RLOD meet the Acceptability Limit fixed at 2.5 for an unpaired study design. The LOD_{50} varies from 0.5 to 2.8 CFU/25g for the reference method for both PCR instruments and from 0.6 to 2.3 CFU/ 25g for the alternative method using the 7500 Fast PCR instrument and from 0.6 to 2.0 CFU/ 25g for the alternative method using the QS5 PCR instrument

3.1.4 Inclusivity / exclusivity

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

3.1.4.1 Test protocols

- **Inclusivity**

E. coli 0157:H7 cultures were performed in BHI medium at 37°C. Dilutions were done in order to inoculate 10 cells/225 ml of pre-warmed BPW (41.5°C ± 1°C). The alternative protocol was then performed after an enrichment time of 8 hours at 41.5°C ±1°C. The PCR tests were performed using the PikoReal PCR instrument.

- **Exclusivity**

Non-target strains were cultured in BHI Broth at 37°C. Dilutions were performed in order to inoculate 10^5 cells/ml of BPW. The alternative protocol was then applied after an enrichment time of 24 hours at 37°C. The PCR were performed using the PikoReal PCR instrument.

3.1.4.2 Results

Raw data are given in **Appendix 6**.

Inclusivity

The 50 isolates tested gave positive PCR test results and were confirmed by streaking the BPW enrichments onto CT-SMAC Agar plates and using the different latex tests.

Exclusivity

No cross reaction was observed among the 30 tested strains.

3.2 Practicability

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

Storage conditions, shelf-life and modalities of utilisation after first use	The reagents remain stable until the expiry date stated on the packaging. The complete box and contents should be stored at 2 - 8°C when not in use.			
Time to result	**Negative samples**			
	Steps	**Reference method**	**Alternative method**	
			8 h	**20h or 24 h**
	Sampling, pre-enrichment	Day 0	Day 0	Day 0
	SureTect™ *E. coli* O157:H7 PCR test	/	Day 0	Day 1
	IMS 6 h	Day 0	/	/
	IMS 24 h	Day 1	/	/
	Selective plated reading	Day 2	/	/
	Final negative result	**Day 2**	**Day 0**	**Day 1**
	Presumptive positive or positive results			
	Steps	**Reference method**	**Alternative method**	
			8 h	**20 h or 24 h**
	Streaking onto CT-SMAC Agar	/	Day 0	Day 1
	Selective reading plate	/	Day 1	Day 2
	Confirmatory test	Day 1 to Day 4	Day 2	Day 3
	Final positive results	**Day 4**	**Day 2**	**Day 3**
Common step with the reference method	No common step			

The alternative method allows screening the negative samples within the same day (Day 0) for raw beef meat and in one day for the vegetables and fruits, while 2 days are required with the reference method.

3.3 Inter-laboratory study

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

3.3.1 Study organisation

The inter-laboratory study was carried out in February 2015 with 14 laboratories. Ground beef was contaminated with *Escherichia coli* O157:H7 ATCC 43888. The **Piko-Real** PCR instrument was used during the study.

Samples were inoculated on Monday 16th February 2015; as described below:

- 24 blind coded samples for *Escherichia coli* O157:H7 detection by Thermo Scientific SureTect™ *Escherichia coli* O157:H7 method,
- 24 blind coded samples for *Escherichia coli* O157 detection by the reference method (EN ISO 16654).

An additional sample was added to the package for aerobic mesophilic flora enumeration by ISO 4833-1 method.

The targeted inoculation levels were:

- Level 0: 0 CFU/25 g,
- Level 1: 2 CFU/25 g,
- Level 2: 10 CFU/25 g.

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

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

Samples were shipped in 24 h to 48 h to the involved laboratories. The temperature conditions had to stay lower or equal to 8.4°C during transport, and between 0°C – 8.4°C in the labs.
Collaborators and ADRIA Développement carried out the analysis with the alternative and reference methods.

3.3.2 Experimental parameters controls

3.3.2.1 Strain stability and background microflora stability

Strain stability was checked by inoculating the matrix at 100 CFU/g and 2 CFU/g. Enumerations were performed for the high contamination level and detection analyses were performed for the low contamination level after 24 h and 48 h storage at 5 ± 3°C. *Triplicates* were analysed. The aerobic mesophilic flora was also enumerated; the results are given in Table 24.

Table 24 - Sample stability

Day	Reference method (detection)			CFU/g (CHROMagar O157)			Aerobic mesophilic flora (CFU/g)
	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3	
Day 0	+	+	+	120	110	110	$1.2\ 10^3$
Day 1	+	+	+	70	30	110	$3.3\ 10^3$
Day 2	+	+	+	120	90	130	$7.1\ 10^3$

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

3.3.2.2 Contamination levels

The contamination levels and the sample codification were the following (see Table 25).

Table 25 - Contamination levels

Level	Samples	Theoretical target level (CFU/25 g)	True level (CFU/25 g sample)	Low limit CFU / 25 g sample	High limit CFU/ 25 g sample
Level 0	6 – 9 – 10 – 15 – 18 – 21 – 23 – 24	0	/	/	/
Low level	2 – 5 – 8 – 12 – 16 – 19 – 20 – 22	2	2.6	2.2	3.1
High level	1 – 3 – 4 – 7 – 11 – 13 – 14 - 17	10	11.1	9.1	13.4

3.3.2.3 Logistic conditions

Temperature conditions are given in Table 26.

Table 26 - Sample temperatures at receipt

Laboratories	Temperature measured by the probe (°C)	Temperature measured at receipt (°C)	Receipt date and time	
A	2.6	3.6	17/02/2015	15h00
B	1.5	4.4	17/02/2015	13h00
C	2.8	3.9	17/02/2015	16h30
D	1.8	3.3	17/02/2015	10h15
E	1.5	4.3	17/02/2015	09h50
F	2.2	3.6	17/02/2015	09h25
G	1.5	5.6	18/02/2015	08h05
H	3.4	3.5	17/02/2015	14h30
I	2.5	7.5	17/02/2015	11h20
J	1.5	7.0	17/02/2015	10h00
K	2.0	5.3	17/02/2015	08h50
M	2.0	3.0	17/02/2015	11h00
N	2.0	3.3	17/02/2015	11h00
O	3.0	6.0	17/02/2015	14h35

All the packages were delivered at Day 1 (17/02/2015), except for Lab G (Day 2).

No problem was encountered during the transport or at receipt for the 14 collaborators. Temperatures during shipment and at receipt were all correct.

3.3.3 Results analysis

Raw data are provided in **Appendix 7**.

3.3.3.1 *Expert laboratory results*

The results obtained by the expert laboratory are given in Table 27.

Table 27 – Results obtained by the expert Lab.

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

3.3.3.2 Results observed by the collaborative laboratories

> ***Aerobic mesophilic flora enumeration***

Depending on the Lab results, the enumeration levels varied from 1 200 to 6 500 CFU/g.

> ***Escherichia coli O157:H7 detection***

14 collaborators participated to the study; they all started the analysis at Day 2 (18/02/2015). The incubation times for the alternative method are given in Table 28.

Table 28 – Alternative enrichment incubation times

Laboratories	Analysis date	Incubation hours		Incubation times
		Beginning	*End*	
A	18/02/2015	12h15	19h45	07h30
B	18/02/2015	09h45	17h30	07h45
C	18/02/2015	08h15	16h15	08h00
D	18/02/2015	07h30	15h30	08h00
E	18/02/2015	09h00	17h00	08h00
F	18/02/2015	08h00	16h00	08h00
G	18/02/2015	08h30	16h30	08h00
H	18/02/2015	15h15	23h30	08h15
I	18/02/2015	08h30	16h30	08h00
J	18/02/2015	09h00	17h00	08h00
K	18/02/2015	10h15	18h00	07h45
M	18/02/2015	12h45	21h15	08h30
N	18/02/2015	09h15	17h15	08h00
O	18/02/2015	09h30	17h30	08h00

The results obtained are provided in Table 29 (reference method) and Table 30 (alternative method).

Table 29 - Positive results by the reference method (ALL the collaborators)

Collaborators	Contamination level		
	L0	L1	L2
A	1	8	8
B	0	8	8
C	0	6	8
D	0	6	8
E	0	8	8
F	0	8	8
G	0	7	8
H	0	8	8
I	2	8	8
J	0	5	8
K	0	6	8
M	0	7	8
N	0	8	8
O	4	8	8
Total	P_0 = 7	P_1 = 101	P_2 = 112

Table 30 - Positive results (before and after confirmation) by the alternative method (ALL the collaborators)

Collaborators	Contamination level								
	L0			L1			L2		
	PCR result	*Confirmation result*	*Final result*	*PCR result*	*Confirmation result*	*Final result*	*PCR result*	*Confirmation result*	*Final result*
A	0	0	0	8	8	8	8	8	8
B	0	0	0	7	7	7	8	8	8
C	0	0	0	7	7	7	8	8	8
D	0	0	0	6	6	6	8	8	8
E	1	0	0	6	6	6	8	8	8
F	0	0	0	6	6	6	8	8	8
G	0	0	0	6	6	6	8	8	8
H	0	0	0	7	7	7	8	8	8
I	0	0	0	7	7	7	8	8	8
J	0	0	0	5	5	5	8	8	8
K	1	0	0	7	7	7	8	8	8
M	0	0	0	7	7	7	8	8	8
N	1	1	0	7	7	7	8	8	8
O	0	0	0	5	5	5	8	8	8
Total	3	1	0	91	91	91	112	112	112

An incubation time close to 8 hours was applied by all the Labs.

For Lab G, the probe was not incubated with the enrichment broths; the incubation hours were communicated by the Lab.

All the PCR positive results observed by the collaborators were confirmed, except in one case (Lab K, sample K21). This Lab proceeded to a second PCR test and found a negative result.

All the samples which gave negative PCR results, gave also negative confirmatory tests, confirming that these samples were clearly negative samples.

3 Labs (A, I and O) obtained positive results on control samples:

- Lab A: 1 for the reference method,
- Lab I: 6 for the reference method,
- Lab O: 4 for the reference method.

According to the AFNOR technical rules, it is possible to include the results from a collaborator with maximum one cross contamination at Level 0. For this study, this rule was applied for Lab A.

Lab B encountered a lot of difficulties to confirm the typical colonies; it was decided to not take into account their results.

3.3.3.3 Results of the collaborators retained for interpretation

The results obtained with the 11 labs kept for interpretation are presented in Table 31 (reference method) and Table 32 (alternative method).

Table 31 - Positive results by the reference method (Without Labs B, I and O)

Collaborators	Contamination level		
	L0	L1	L2
A	1	8	8
C	0	6	8
D	0	6	8
E	0	8	8
F	0	8	8
G	0	7	8
H	0	8	8
J	0	5	8
K	0	6	8
M	0	7	8
N	0	8	8
Total	P_0 = 1	P_1 = 77	P_2 = 88

Table 32 - Positive results (before and after confirmation) by the alternative method (Without Labs B, I and O)

Collaborators	Contamination level								
	L0			L1			L2		
	PCR result	*Confirmation result*	*Final result*	*PCR result*	*Confirmation result*	*Final result*	*PCR result*	*Confirmation result*	*Final result*
A	0	0	0	8	8	8	8	8	8
C	0	0	0	7	7	7	8	8	8
D	0	0	0	6	6	6	8	8	8
E	1	0	0	6	6	6	8	8	8
F	0	0	0	6	6	6	8	8	8
G	0	0	0	6	6	6	8	8	8
H	0	0	0	7	7	7	8	8	8
J	0	0	0	5	5	5	8	8	8
K	1	0	0	7	7	7	8	8	8
M	0	0	0	7	7	7	8	8	8
N	0	0	0	7	7	7	8	8	8
Total	2	0	0	72	72	72	88	88	88

3.3.4 Calculation and interpretation

3.3.4.1 *Calculation of the specificity percentage (SP)*

The percentage specificities (SP) of the reference method and of the alternative method, using the data after confirmation, based on the results of level L0 are the following (See Table 33).

Table 33 - Percentage specificity

Specificity for the reference method	$SP_{ref} = \left(1 - \left(\frac{P_0}{N_-}\right)\right) x\ 100\ \% =$	98.9 %
Specificity for the alternative method	$SP_{alt} = \left(1 - \left(\frac{CP_0}{N_-}\right)\right) x\ 100\ \% =$	100.0 %

N: number of all L0 tests
P_0 = total number of false-positive results obtained with the blank samples before confirmation
CP_0 = total number of false-positive results obtained with the blank samples

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

Fractional positive results were obtained for the low inoculation level (L1). This inoculation level was retained for calculation.

A summary of the results of the collaborators retained for interpretation and obtained with the reference and the alternative methods for Level 1 is provided in Table 34.

Table 34 - Summary of the obtained results with the reference method and the alternative method for Level

Level	Response	Reference method positive (R+)	Reference method negative (R-)
1	Alternative method positive (A+)	Positive agreement (A+/R+) **PA = 64**	Positive deviation (R-/A+) **PD = 8**
	Alternative method negative (A-)	Negative deviation (A-/R+) **ND = 13 (PPND=0)**	Negative agreement (A-/R-) **NA = 3 (PPNA=0)**

Based on the data summarized in Table 34, the values of sensitivity of the alternative and reference methods, as well as the relative trueness and false positive ratio for the alternative method taking account the confirmations, are the following (See Table 35).

Table 35 - Sensitivity, relative trueness and false positive ratio percentages

		Level 1
Sensitivity for the alternative method:	$SE_{alt} = \frac{(PA+PD)}{(PA+PD+ND)} x\ 100\% =$	84.7 %
Sensitivity for the reference method:	$SE_{ref} = \frac{(PA+ND)}{(PA+PD+ND)} x\ 100\% =$	90.6 %
Relative trueness	$RT = \frac{(PA+NA)}{N} x\ 100\% =$	76.1 %
False positive ratio for the alternative method	$FPR = \frac{FP}{NA} x\ 100\% =$	0.0 %

3.3.4.3 Interpretation of data

The negative deviations are listed in Table 36 and the positive deviations in Table 37 for Level 1.

Table 36 - Negative deviations for Level 1

Collaborator	Sample No	Confirmation
D	5	-
E	5 - 16	-
F	5 - 8	-
G	5 - 16	+
H	22	-
J	5 - 20	+ (N°5) - (N°20)
K	19	-
M	12 - 22	-

Table 37 - Positive deviations for Level 1

Collaborator	Sample No
C	16
D	8
G	8
J	16 - 19
K	2 - 22
M	22

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

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

where

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

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

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

where

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

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

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

where

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

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

In this study, fractional recovery was observed at Level 1. The calculations are the following, according to the EN ISO 16140-2:2016 (See Table 38).

Table 38 - Calculations

	Level 1
N_X	88
$(p+)_{ref}$	0.86
$(p+)_{alt}$	0.80
AL = (ND - PD) max	8.6
ND - PD	5.0
Conclusion	ND - PD < AL

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

3.3.4.4 Evaluation of the LOD $_{50\%}$, LOD $_{95\ \%}$ and RLOD between laboratories

The LOD $_{50\%}$, the LOD $_{95\ \%}$ and the RLOD was calculated using the EN ISO 16140-2:2016 Excel spreadsheet available at https://standards.iso.org/iso/16140/-5/ed-1/en/RLOD_inter-lab-study_16140-2_AnnexF_ver1_28-06-2017.xls.
Note that the results from collaborators A were not used for calculation as one positive result was obtained for non-inoculated samples with the ISO 16654 method.

Table 39 - LOD $_{50\%}$, LOD $_{95\ \%}$ and RLOD

Method	LOD 50%	LOD 95%	RLOD
Reference	0,70 [0,53-0,92]	3,02 [2,28-4,00]	1,23 [0,89-1,70]
Alternative	0,86 [0,65-1,13]	3,71 [2,82-4,88]	

3.4 General conclusion

The **method comparison study conclusions** are:

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

- ☒ In the sensitivity study, two food categories were tested: raw beef meat and fruits and vegetables. The protocol of the alternative method shows 11 positive deviations and 8 negative deviations for the 7500 Fast PCR instrument (8h and 24h incubation time of the enrichment broth), and 15 or 16 positive deviations (depending on the incubation time applied for the raw beef meat

category enrichment step) and 15 negative deviations for the QS5 PCR instrument. The ND + PPND - PD meet the acceptability limits (AL) whatever the categories and for both PCR instruments, and as well for the two tested categories.

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

☒ The inclusivity and exclusivity testing gave the expected results for the 50 target strains and the 30 non-target strains.

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

☒ The alternative method allows screening the negative samples within the same day (Day 0) for the raw beef meat category when applying the short incubation time, while 2 days are required with the reference method.

☒ The alternative method fulfils all the EN ISO 16140-2:2016 and AFNOR technical rules (revision 6).

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

☒ The data and interpretations comply with the EN ISO 16140-2:2016 requirements. **The Thermo Scientific™ SureTect™ *E. coli* O157:H7 PCR Assay for the detection of *Escherichia coli* O157:H7 is considered equivalent to the ISO standard.**

Quimper, 23 February 2023

Maryse RANNOU
Project Manager
Validation of Alternative methods

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

Appendix 1 – Flow diagram of the alternative method:
Thermo Scientific™ SureTect™ *E. coli* O157:H7 PCR Assay

Raw beef meat / Short protocol	**Vegetables and fruits**
25 g + 225 ml pre-warmed BPW at 41.5°C ± 1°C	**25 g + 225 ml BPW**
8 h - 24 h at 41.5°C ± 1°C[2]	**20 - 24 h at 41.5°C ± 1°C**

Storage of the enrichment broth for 72 h at 5°C ± 3°C →

1 ml aliquot in a sterile Eppendorf tube

↓

In a lysis Reagent 1 tube, add:
- 10 µl Proteinase K
- 10 µl aliquoted enriched sample

↓

Heat treatment:
37°C for 10 min
95°C for 5 min

↓

Cool 2 min at room temperature

↓

PCR on 20 µl of lysate
(PikoReal PCR Instrument or 7500 Fast PCR Instrument or QS5 PCR Instrument)

↓

Positive results confirmation:
Streak 50 µl of the enriched sampled onto CT-SMAC Agar
Or, if needed, IMS followed by streaking onto CT-SMAC Agar

↓

18 - 24 h at 37°C ± 1°C

↓

Observe for presumptive *E. coli* O157:H7 colonies

↓

Confirm by using O157 latex test with or without a purification step
Confirm typical colonies by using H7 latex test after a purification step

[2] Both incubation times were tested for the validation study.

Appendix 2 – Flow diagram of the reference method:
ISO 16654 (May 2001): Microbiology of food and animal feeding stuffs - Horizontal method for the detection of *Escherichia coli* O157 -
Amendment 1 (March 2017): annex B: result of inter-laboratory studies

25 g sample or 125 g sample
1/10 dilution in mTSB + novobiocin (20 mg/L) pre-warmed (41.5°C ± 1°C)
↓
6 h at 41.5°C ± 1°C → *Re-incubation for 12 - 18 h at 41.5°C ±1°C if necessary* → Immuno-magnetic separation (IMS)
↓
using Captivate immunobeads
on 1 ml enriched samples
↓
Streak IMS suspensions:
50 µl onto CT-SMAC
50 µl onto CHROMagar O157
↓
Incubate 24 h ± 2 h at 37°C
↓
Subculture characteristic colonies on TSA
↓
24 h ± 2 h at 37°C
↓
Confirmation tests:
Indol test and latex tests
(O157 and H7)

Appendix 3 – Artificial contamination

7500 Fast PCR instrument											
Date	N° Sample	Product (French name)	Product	Artificial contaminations				Global result		Category	Type
				Strain	Origin	Injury protocol	Inoculation level CFU/sample Mean	8h	24h		
2016	**4424**	**Bavette d'aloyau surgelée**	**Frozen beef trim**	*E. coli* O157:H7 Ad485	Ground beef	Seeding -20°c 1week	1,2	+	+	1	c
2016	**4425**	**Bavette d'aloyau surgelée**	**Frozen beef trim**	*E. coli* O157:H7 Ad683	Beef balls	Seeding -20°c 1week	3,2	+	+	1	c
2016	**4426**	**Pavé de boeuf mariné à l'échalotte surgelé**	**Frozen marinated beef trim**	*E. coli* O157:H7 Ad687	Beef trim	Seeding -20°c 1week	1,8	+	+	1	b
2016	**4427**	**Biftek de charolais surgelé**	**Frozen beef trim**	*E. coli* O157:H7 Ad485	Ground beef	Seeding -20°c 1week	1,2	+	+	1	c
2016	**4428**	**Steak haché à l'oignon surgelé**	**Frozen seasoned ground beef**	*E. coli* O157:H7 Ad683	Beef balls	Seeding -20°c 1week	3,2	+	+	1	b
2016	**4429**	**Steak haché à l'oignon surgelé**	**Frozen seasoned ground beef**	*E. coli* O157:H7 Ad687	Beef trim	Seeding -20°c 1week	1,8	+	+	1	b
2016	**4430**	**Steak haché <15% MG surgelé**	**Frozen ground beef**	*E. coli* O157:H7 Ad485	Ground beef	Seeding -20°c 1week	1,2	+	+	1	a
2016	**4431**	**Steak haché <15% MG**	**Frozen ground beef**	*E. coli* O157:H7 Ad683	Beef balls	Seeding -20°c 1week	3,2	+	+	1	a
2016	**4584**	**Steak à griller**	**Beef trim**	*E. coli* O157:H7 Ad684	Carpaccio	Seeding 4°c 48h	2,0	+	+	1	c
2016	**4585**	**Steak à griller**	**Beef trim**	*E. coli* O157:H7 Ad924	Ground beef	Seeding 4°c 48h	2,8	+	+	1	c
2016	**4586**	**Faux filet**	**Beef trim**	*E. coli* O157:H7 Ad975	Beef meat	Seeding 4°c 48h	2,4	-	-	1	c
2016	**4587**	**Rumsteack**	**Beef trim**	*E. coli* O157:H7 Ad684	Carpaccio	Seeding 4°c 48h	2,0	+	+	1	c
2016	**4588**	**Tournedos**	**Beef trim**	*E. coli* O157:H7 Ad924	Ground beef	Seeding 4°c 48h	2,8	+	+	1	c
2016	**4589**	**Rumsteack échalotte**	**Marinated beef trim**	*E. coli* O157:H7 Ad975	Beef meat	Seeding 4°c 48h	2,4	+	+	1	b
2016	**4590**	**Rumsteak 3 poivres**	**Seasoned beef trim**	*E. coli* O157:H7 Ad684	Carpaccio	Seeding 4°c 48h	2,0	+	+	1	b
2016	**4591**	**Haché frais**	**Ground beef**	*E. coli* O157:H7 Ad924	Ground beef	Seeding 4°c 48h	2,8	+	+	1	a
2016	**4592**	**Steak haché Bolognaise**	**Seasoned ground beef**	*E. coli* O157:H7 Ad975	Beef meat	Seeding 4°c 48h	2,4	+	+	1	b
2016	**4593**	**Carpaccio olive**	**Carpaccio olive**	*E. coli* O157:H7 Ad684	Carpaccio	Seeding 4°c 48h	2,0	+	+	1	b
2016	**4594**	**Carpaccio parmesan**	**Carpaccio cheese**	*E. coli* O157:H7 Ad924	Ground beef	Seeding 4°c 48h	2,8	+	+	1	b
2016	**4595**	**Carpaccio basilic**	**Carpaccio basilic**	*E. coli* O157:H7 Ad975	Beef meat	Seeding 4°c 48h	2,4	+	+	1	b
2016	**4596**	**Carpaccio parmesan**	**Carpaccio cheese**	*E. coli* O157:H7 Ad684	Carpaccio	Seeding 4°c 48h	2,0	+	+	1	b
2016	**4597**	**Carpaccio pistou**	**Carpaccio pistou**	*E. coli* O157:H7 Ad924	Ground beef	Seeding 4°c 48h	2,8	+	+	1	b
2016	**4598**	**Carpaccio noisette**	**Carpaccio hazelnut**	*E. coli* O157:H7 Ad975	Beef meat	Seeding 4°c 48h	2,4	+	+	1	b
2016	**4856**	**Steak haché surgelé**	**Frozen ground beef**	*E. coli* O157:H7 Ad976	Beef meat	Seeding -20°c 1week	3,2	+	+	1	a
2016	**4857**	**Steak haché surgelé**	**Frozen ground beef**	*E. coli* O157:H7 Ad1174	Frozen ground beef	Seeding -20°c 1week	2,2	+	+	1	a
2016	**4858**	**Egréné de bœuf surgelé 15% MG**	**Frozen ground beef**	*E. coli* O157:H7 Ad976	Beef meat	Seeding -20°c 1week	3,2	+	+	1	a
2016	**4859**	**Egréné de bœuf surgelé 15% MG**	**Frozen ground beef**	*E. coli* O157:H7 Ad1174	Frozen ground beef	Seeding -20°c 1week	2,2	+	+	1	a
2016	**4860**	**Steak haché frais 5% MG**	**Ground beef**	*E. coli* O157:H7 Ad1248	Ground beef	Seeding 4°c 48h	1,8	+	+	1	a
2016	**4861**	**Steak haché**	**Ground beef**	*E. coli* O157:H7 Ad1248	Ground beef	Seeding 4°c 48h	1,8	+	+	1	a
2016	**4862**	**Haché au bœuf**	**Ground beef**	*E. coli* O157:H7 Ad559	Ground beef	Seeding 4°c 48h	1,2	-	-	1	a
2016	**4863**	**Steak haché 8% MG**	**Ground beef**	*E. coli* O157:H7 Ad559	Ground beef	Seeding 4°c 48h	1,2	+	+	1	a
2016	**4864**	**Carpaccio pur bœuf**	**Carpaccio**	*E. coli* O157:H7 Ad566	Ground beef	Seeding 4°c 48h	2,0	-	-	1	c
2016	**4865**	**Steak haché à la bolognaise 15% MG**	**Seasoned ground beef**	*E. coli* O157:H7 Ad566	Ground beef	Seeding 4°c 48h	2,0	+	+	1	b

QS5 PCR instrument											
Date	N° Sample	Product (French name)	Product	Artificial contaminations				Global result		Category	Type
				Strain	Origin	Injury protocol	Inoculation level CFU/sample Mean	8h	24h		
2019	**3312**	**Steak haché frais 15% MG**	**Ground beef**	*E. coli* O157:H7 Ad581	Faeces	Seeding 48h 3±2°C	1,4	+	+	1	a
2019	**3313**	**Steak haché frais 15% MG**	**Ground beef**	*E. coli* O157:H7 Ad2222	Ground beef	Seeding 48h 3±2°C	2,0	-	-	1	a
2019	**3314**	**Steak haché frais 5% MG**	**Ground beef**	*E. coli* O157:H7 1043	Frozen ground beef	Seeding 48h 3±2°C	2,2	+	+	1	a
2019	**3315**	**Steak haché frais 5% MG**	**Ground beef**	*E. coli* O157:H7 1211-1	Frozen ground beef	Seeding 48h 3±2°C	1,8	+	+	1	a
2019	**3316**	**Haché de bœuf frais**	**Ground beef**	*E. coli* O157:H7 769	Ground beef	Seeding 48h 3±2°C	0,6	+	+	1	a
2019	**3317**	**Viande bovine pièce à fondue**	**Beef trim**	*E. coli* O157:H7 Ad581	Faeces	Seeding 48h 3±2°C	1,4	+	+	1	c
2019	**3318**	**Viande bovine pièce à fondue**	**Beef trim**	*E. coli* O157:H7 Ad2222	Ground beef	Seeding 48h 3±2°C	2,0	-	+	1	c
2019	**3319**	**Steak à griller**	**Beef trim**	*E. coli* O157:H7 1043	Frozen ground beef	Seeding 48h 3±2°C	2,2	-	-	1	c
2019	**3320**	**Steak à griller**	**Beef trim**	*E. coli* O157:H7 1211-1	Frozen ground beef	Seeding 48h 3±2°C	1,8	+	+	1	c
2019	**3321**	**Bavette d'Aloyau à griller**	**Beef trim**	*E. coli* O157:H7 769	Ground beef	Seeding 48h 3±2°C	0,6	+	+	1	c
2019	**3322**	**Pavé de rumsteak aux 3 poivres**	**Seasoned beef trim**	*E. coli* O157:H7 Ad581	Faeces	Seeding 48h 3±2°C	1,4	+	+	1	b
2019	**3323**	**Pavé de rumsteak aux 3 poivres**	**Seasoned beef trim**	*E. coli* O157:H7 Ad2222	Ground beef	Seeding 48h 3±2°C	2,0	+	+	1	b
2019	**3324**	**Haché de bœuf bolognaise**	**Seasoned ground beef**	*E. coli* O157:H7 1043	Frozen ground beef	Seeding 48h 3±2°C	2,2	+	+	1	b
2019	**3326**	**Carpaccio au basilic**	**Basilic carpaccio**	*E. coli* O157:H7 769	Ground beef	Seeding 48h 3±2°C	0,6	-	-	1	b
2019	**3329**	**Pavé de rumsteak à l'échalotte**	**Seasoned beef trim**	*E. coli* O157:H7 1043	Frozen ground beef	Seeding 48h 3±2°C	2,2	+	+	1	b
2019	**3293**	**Boulettes au bœuf à l'oignon surgelées**	**Frozen seasoned ground beef**	*E. coli* O157:H7 Ad488	Beef	Seeding 15 days at -20°C	1,4	+	+	1	b
2019	**3294**	**Boulettes au bœuf à l'oignon surgelées**	**Frozen seasoned ground beef**	*E. coli* O157:H7 Ad489	Beef	Seeding 15 days at -20°C	1,2	+	+	1	b
2019	**3295**	**Viande de bœuf burger épicée surgelée**	**Frozen seasoned ground beef**	*E. coli* O157:H7 Ad1501	Beef	Seeding 15 days at -20°C	1,8	+	+	1	b
2019	**3296**	**Haché de bœuf 20 % MG surgelé**	**Frozen ground beef**	*E. coli* O157:H7 Ad488	Beef	Seeding 15 days at -20°C	1,4	+	+	1	a
2019	**3297**	**Haché de bœuf 20 % MG surgelé**	**Frozen ground beef**	*E. coli* O157:H7 Ad489	Beef	Seeding 15 days at -20°C	1,2	+	+	1	a
2019	**3298**	**Steaks hachés pur bœuf 15% MG surgelé**	**Frozen ground beef**	*E. coli* O157:H7 Ad1501	Beef	Seeding 15 days at -20°C	1,8	+	+	1	a
2019	**3299**	**Steaks hachés surgelés**	**Frozen ground beef**	*E. coli* O157:H7 Ad488	Beef	Seeding 15 days at -20°C	1,4	+	+	1	a
2019	**3300**	**Steaks hachés surgelés**	**Frozen ground beef**	*E. coli* O157:H7 Ad489	Beef	Seeding 15 days at -20°C	1,2	+	+	1	a
2019	**3301**	**Pavé de rumsteak surgelé**	**Frozen beef trim**	*E. coli* O157:H7 Ad488	Beef	Seeding 15 days at -20°C	1,4	+	+	1	c
2019	**3302**	**Pavé de rumsteak surgelé**	**Frozen beef trim**	*E. coli* O157:H7 Ad489	Beef	Seeding 15 days at -20°C	1,2	-	-	1	c
2019	**3303**	**Entrecôte surgelée**	**Frozen beef trim**	*E. coli* O157:H7 Ad1501	Beef	Seeding 15 days at -20°C	1,8	+	+	1	c
2019	**3304**	**Effeuillés de bœuf surgelés**	**Frozen beef trim**	*E. coli* O157:H7 Ad1501	Beef	Seeding 15 days at -20°C	1,8	+	+	1	c
2019	**3305**	**Effeuillés de bœuf surgelés**	**Frozen beef trim**	*E. coli* O157:H7 Ad489	Beef	Seeding 15 days at -20°C	1,2	+	+	1	c
2019	**4497**	**Steak haché frais pur boeuf**	**Ground beef**	*E. coli* O157:H7 Ad976	Beef meat	Seeding 48h 3±2°C	0,8	-	-	1	a
2019	**4498**	**Steak haché pur bœuf**	**Ground beef**	*E. coli* O157:H7 Ad1071	Ground beef	Seeding 48h 3±2°C	0,6	+	+	1	a
2019	**4499**	**Viande bovine bourguignon**	**Beef trim**	*E. coli* O157:H7 Ad976	Beef meat	Seeding 48h 3±2°C	0,8	+	+	1	c
2019	**4500**	**Viande bovine steak à griller**	**Beef trim**	*E. coli* O157:H7 Ad1174	Frozen ground beef	Seeding 48h 3±2°C	2,0	-	-	1	c
2019	**4501**	**Viande bovine entrecôte à griller**	**Beef trim**	*E. coli* O157:H7 Ad1071	Ground beef	Seeding 48h 3±2°C	0,6	+	+	1	c
2019	**5848**	**Haché bolognaise**	**Seasoned ground beef**	*E. coli* O157:H7 Ad559	Ground beef	Seeding 48h 3±2°C	6,4	+	+	1	b
2019	**5849**	**Haché bolognaise**	**Seasoned ground beef**	*E. coli* O157:H7 Ad924	Ground beef	Seeding 48h 3±2°C	5,8	+	+	1	b
2019	**5850**	**Steak haché à l'oignon**	**Seasoned ground**	*E. coli* O157:H7 Ad933	Ground beef	Seeding 48h 3±2°C	6,6	+	+	1	b
2019	**5851**	**Steak haché à l'oignon**	**Seasoned ground beef**	*E. coli* O157:H7 Ad559	Ground beef	Seeding 48h 3±2°C	6,4	+	+	1	b
2019	**5852**	**Carpaccio marinade à la mangue**	**Marinated beef trim**	*E. coli* O157:H7 Ad924	Ground beef	Seeding 48h 3±2°C	5,8	+	+	1	b

7500 Fast PCR instrument / QS5 PCR instrument										
Date	N° Sample	Product (French name)	Product	Artificial contaminations				Global result 20h	Category	Type
				Strain	Origin	Injury protocol	Inoculation level CFU/sample Mean			
2019	3306	Petit pois doux extra-fins surgelés	Frozen peas	*E. coli* O157:H7 Ad556	Wastewater treatment	Seeding 15 days at -20°C	2,8	-	2	b
2019	3307	Petit pois doux extra-fins surgelés	Frozen peas	*E. coli* O157:H7 Ad571	Faeces	Seeding 15 days at -20°C	7,4	+	2	b
2019	3308	Haricots verts bio surgelés	Frozen green beans	*E. coli* O157:H7 Ad556	Wastewater treatment	Seeding 15 days at -20°C	2,8	+	2	b
2019	3309	Haricots verts bio surgelés	Frozen green beans	*E. coli* O157:H7 Ad571	Faeces	Seeding 15 days at -20°C	7,4	+	2	b
2019	3310	Choux fleurs en fleurette surgelés	Frozen cauliflower	*E. coli* O157:H7 Ad571	Faeces	Seeding 15 days at -20°C	7,4	+	2	b
2019	3311	Choux fleurs en fleurette surgelés	Frozen cauliflower	*E. coli* O157:H7 Ad556	Wastewater treatment	Seeding 15 days at -20°C	2,8	+	2	b
2019	4185	Graines germées radis	Sprouts (radish)	*E. coli* O157:H7 Ad557	Wastewater	Seeding 48h 3±2°C	1,6	-	2	a
2019	4186	Fines pousses radis	Sprouts (radish)	*E. coli* O157:H7 Ad558	Wastewater	Seeding 48h 3±2°C	2,8	-	2	a
2019	4187	Fines pousses poireaux	Sprouts (leeks)	*E. coli* O157:H7 Ad574	Faeces	Seeding 48h 3±2°C	2,6	-	2	a
2019	4188	Fines pousses poireaux	Sprouts (leeks)	*E. coli* O157:H7 Ad579	Faeces	Seeding 48h 3±2°C	2,4	-	2	a
2019	4189	Fines pousses alfalfa	Sprouts (alfalfa)	*E. coli* O157:H7 Ad580	Faeces	Seeding 48h 3±2°C	3,0	-	2	a
2019	4190	Fines pousses alfalfa	Sprouts (alfalfa)	*E. coli* O157:H7 Ad582	Faeces	Seeding 48h 3±2°C	3,0	+	2	a
2019	4191	Fines pousses alfalfa, radis, fenouil	Sprouts (alfalfa, radish, fennel)	*E. coli* O157:H7 Ad557	Wastewater	Seeding 48h 3±2°C	1,6	-	2	a
2019	4192	Fines pousses alfalfa, radis, fenouil	Sprouts (alfalfa, radish, fennel)	*E. coli* O157:H7 Ad558	Wastewater	Seeding 48h 3±2°C	2,8	-	2	a
2019	4193	Fines pousses alfalfa lentilles poireau	Sprouts (alfalfa, lentils, fennel)	*E. coli* O157:H7 Ad574	Faeces	Seeding 48h 3±2°C	2,6	-	2	a
2019	4194	Fines pousses alfalfa lentilles poireau	Sprouts (alfalfa, lentils, fennel)	*E. coli* O157:H7 Ad579	Faeces	Seeding 48h 3±2°C	2,4	+	2	a
2019	4195	Mâche	Baby leaves	*E. coli* O157:H7 Ad580	Faeces	Seeding 48h 3±2°C	3,0	-	2	b
2019	4196	Coriandre	Leafy greens (coriander)	*E. coli* O157:H7 Ad582	Faeces	Seeding 48h 3±2°C	3,0	+	2	b
2019	4197	Persil plat	Leafy greens (parsley)	*E. coli* O157:H7 Ad557	Wastewater	Seeding 48h 3±2°C	1,6	+	2	b
2019	4198	Oseille	Leafy greens (sorrel)	*E. coli* O157:H7 Ad558	Wastewater	Seeding 48h 3±2°C	2,8	+	2	b
2019	4199	Oseille	Leafy greens (sorrel)	*E. coli* O157:H7 Ad574	Faeces	Seeding 48h 3±2°C	2,6	+	2	b
2019	4200	Jus d'orange de méditerranée	Orange juice	*E. coli* O157:H7 Ad579	Faeces	Seeding 48h 3±2°C	2,4	+	2	c
2019	4201	Jus mangue passion	Mango juice	*E. coli* O157:H7 Ad580	Faeces	Seeding 48h 3±2°C	3,0	+	2	c
2019	4202	Jus d'orange framboise fraise	Raspberry strawberry juice	*E. coli* O157:H7 Ad582	Faeces	Seeding 48h 3±2°C	3,0	-	2	c
2019	4203	Jus d'orange bio	Orange juice	*E. coli* O157:H7 Ad557	Wastewater	Seeding 48h 3±2°C	1,6	+	2	c
2019	4204	Jus de pomme	Apple juice	*E. coli* O157:H7 Ad558	Wastewater	Seeding 48h 3±2°C	2,8	+	2	c
2019	4205	Poire	Perry	*E. coli* O157:H7 Ad574	Faeces	Seeding 48h 3±2°C	2,6	+	2	c
2019	4206	Pêche plate	Peach	*E. coli* O157:H7 Ad579	Faeces	Seeding 48h 3±2°C	2,4	+	2	c
2019	4207	Ananas découpés	Cut pineapple	*E. coli* O157:H7 Ad580	Faeces	Seeding 48h 3±2°C	3,0	+	2	c
2019	4208	Melon découpés	Cut melon	*E. coli* O157:H7 Ad582	Faeces	Seeding 48h 3±2°C	3,0	+	2	c
2019	4209	Melon découpés	Cut melon	*E. coli* O157:H7 Ad557	Wastewater	Seeding 48h 3±2°C	1,6	+	2	c
2019	4503	Graines germées (poireaux, petits pois, betteraves, vitalfa)	Sprouts (leeks, peas, beets, vitalfa)	*E. coli* O157:H7 EF190	Faeces	Seeding 48h 3±2°C	1,4	-	2	a
2019	4504	Graines germées (poireaux, petits pois, betteraves, vitalfa)	Sprouts (leeks, peas, beets, vitalfa)	*E. coli* O157:H7 Ad558	Wastewater	Seeding 48h 3±2°C	1,6	-	2	a
2019	4505	Fines pousses (betteraves rouges)	Sprouts (beets)	*E. coli* O157:H7 Ad575	Faeces	Seeding 48h 3±2°C	2,2	-	2	a
2019	4506	Fines pousses (betteraves rouges)	Sprouts (beets)	*E. coli* O157:H7 Ad576	Faeces	Seeding 48h 3±2°C	2,0	-	2	a
2019	4507	Fines pousses (radis)	Sprouts (radish)	*E. coli* O157:H7 EF190	Faeces	Seeding 48h 3±2°C	1,4	+	2	a
2019	4508	Fines pousses (radis)	Sprouts (radish)	*E. coli* O157:H7 Ad558	Wastewater	Seeding 48h 3±2°C	1,6	-	2	a
2019	4509	Fines pousses (alfalfa, lentilles, poireaux)	Sprouts (alfalfa, lentils, leeks)	*E. coli* O157:H7 Ad575	Faeces	Seeding 48h 3±2°C	2,2	+	2	a
2019	4510	Fines pousses (alfalfa, lentilles, poireaux)	Sprouts (alfalfa, lentils, leeks)	*E. coli* O157:H7 Ad576	Faeces	Seeding 48h 3±2°C	2,0	-	2	a
2019	4511	Fines pousses (alfalfa)	Sprouts(alfalfa)	*E. coli* O157:H7 Ad577	Faeces	Seeding 48h 3±2°C	2,2	-	2	a
2019	4512	Fines pousses (alfalfa)	Sprouts(alfalfa)	*E. coli* O157:H7 Ad558	Wastewater	Seeding 48h 3±2°C	1,6	-	2	a
2019	4513	Pur jus de kaki bio	Kaki juice	*E. coli* O157:H7 Ad577	Faeces	Seeding 48h 3±2°C	1,2	+	2	c
2019	4514	Mangue découpée	Cut mango	*E. coli* O157:H7 Ad576	Faeces	Seeding 48h 3±2°C	1,6	+	2	c

7500 Fast PCR instrument / QS5 PCR instrument										
Date	N° Sample	Product (French name)	Product	Artificial contaminations				Global result 20h	Category	Type
				Strain	Origin	Injury protocol	Inoculation level CFU/sample Mean			
2019	**5797**	**Fines pousses alfalfa, lentilles poireaux**	**Sprouts (alfalfa, lentils, leeks)**	*E. coli* O157:H7 Ad572	Faeces	Seeding 48h 3±2°C	6,4	-	2	a
2019	**5798**	**Fines pousses alfalfa, lentilles poireaux**	**Sprouts (alfalfa, lentils, leeks)**	*E. coli* O157:H7 Ad573	Faeces	Seeding 48h 3±2°C	5,8	+	2	a
2019	**5799**	**Fines pousses alfalfa**	**Sprouts(alfalfa)**	*E. coli* O157:H7 Ad572	Faeces	Seeding 48h 3±2°C	6,4	+	2	a
2019	**5800**	**Fines pousses alfalfa**	**Sprouts(alfalfa)**	*E. coli* O157:H7 Ad573	Faeces	Seeding 48h 3±2°C	5,8	+	2	a
2019	**5801**	**Fines pousses alfalfa, lentilles poireaux**	**Sprouts (alfalfa, lentils, leeks)**	*E. coli* O157:H7 Ad581	Faeces	Seeding 48h 3±2°C	3,6	+	2	a
2019	**5802**	**Fines pousses alfalfa**	**Sprouts(alfalfa)**	*E. coli* O157:H7 Ad581	Faeces	Seeding 48h 3±2°C	3,6	+	2	a
2019	**5803**	**Salade sucrine**	**Leafy greens (sucrine salad)**	*E. coli* O157:H7 Ad572	Faeces	Seeding 48h 3±2°C	2,8	+	2	b
2019	**5804**	**Mâche**	**Leafy greens**	*E. coli* O157:H7 Ad573	Faeces	Seeding 48h 3±2°C	2,0	-	2	b
2019	**5805**	**Cresson**	**Leafy greens (cress)**	*E. coli* O157:H7 Ad581	Faeces	Seeding 48h 3±2°C	1,8	+	2	b

Appendix 4 - Sensitivity study: raw data

Bold typing: artificially inoculated samples

***E. coli* O157:H7 detection results:**

m:	minority level of target analyte
M :	majority level of target analyte
P:	pure culture level of target analyte
1/2 :	50% level of target analyte
(x):	number of colonies on the plate
-:	no typical colonies but presence of background microflora
st:	plate without any colony
d:	doubtful result
NC:	non-characteristic colony onto nutritive agar
i:	PCR inhibition
PA:	positive agreement
NA:	negative agreement
ND:	negative deviation
PD:	positive deviation
PPNA:	positive presumptive negative agreement
PPND:	positive presumptive negative deviation
(1)	**protocol for confirmation recommended in the IFU on page 23**
*:	PCR inhibition, 1/5 dilution of the enrichment before new extraction step

RAW BEEF MEAT																										
Date	N° Sample	Product (French name)	Product	Reference method: ISO 16654 ♦					Alternative method: SureTect *E. coli* O157:H7 (7500 Fast PCR instrument)																Category	Type
									BPW pre-warmed for 8 - 24h at 41.5°C																	
									Incubation time 8h							Incubation time 24h								IMS/ CT SMAC		
				IMS 6h		IMS 24h		Final Result	PCR 7500 Fast (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 8h	Agree-ment Ref/Alt	PCR 7500 Fast (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 24h	Agree-ment Ref/Alt			
				CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157																			
2016	**4430**	**Steak haché <15% MG surgelé**	**Frozen ground beef**	+p	+M	/	/	+	+(27,65/28,22)	+M	+	+	+	+	**PA**	+(25,61/26,54)	+M	+	+	+	+	**PA**		1	a
2016	**4431**	**Steak haché <15% MG**	**Frozen ground beef**	+p	+M	/	/	+	+(30,03/31,12)	+p	+	+	+	+	**PA**	+(28,37/29,74)	+p	+	+	+	+	**PA**		1	a
2016	**4591**	**Haché frais**	**Ground beef**	+p	+M	/	/	+	+(26,16/26,53)	+M	+	+	+	+	**PA**	+(23,25/24,26)	+p	+	+	+	+	**PA**		1	a
2016	**4856**	**Steak haché surgelé**	**Frozen ground beef**	+p	+M	/	/	+	+(24,16/36,06)	+M	+			+	**PA**	+(21,94/29,46)	+M	+	+	+	+	**PA**		1	a
2016	**4857**	**Steak haché surgelé**	**Frozen ground beef**	+p	+M	/	/	+	+(30,16/30,54)	+M	+			+	**PA**	+(25,36/26,12)	+M	+	+	+	+	**PA**		1	a
2016	**4858**	**Egréné de bœuf surgelé 15% MG**	**Frozen ground beef**	st	+(1)	+p	+(1)	+	-(31,21/)	-				-	**ND**	+(22,24/)	-				-	**ND**	**-**	1	a
2016	**4859**	**Egréné de bœuf surgelé 15% MG**	**Frozen ground beef**	+p	+p	/	/	+	+(28,64/28,88)	+p	+	+	+	+	**PA**	+(23,29/24,23)	+p	+	+	+	+	**PA**		1	a
2016	**4860**	**Steak haché frais 5% MG**	**Ground beef**	+(2)	+(5)	+M	+m	+	+(26,74/27,63)	+M	+	+	+	+	**PA**	+(26,23/27,60)	+M	+	+	+	+	**PA**		1	a
2016	**4861**	**Steak haché**	**Ground beef**	+p	+p	/	/	+	+(27,20/27,41)	+p	+	+	+	+	**PA**	+(25,42/26,39)	+p	+	+	+	+	**PA**		1	a
2016	**4862**	**Haché au bœuf**	**Ground beef**	st	-	-	-	-	-/-	st				-	**NA**	-/-	+md		-(x5)	-(x5)	-	**NA**	**st**	1	a
2016	**4863**	**Steak haché 8% MG**	**Ground beef**	+p	+p	+p	+p	+	+(26,25/28,65)	+1/2	+	+	+	+	**PA**	+(23,92/26,37)	+m	+	+	+	+	**PA**		1	a
2016	5942	Steak haché	Ground beef	st	-	st	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2016	5943	Steak haché	Ground beef	-	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2016	5944	Steak haché	Ground beef	st	-	st	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	st	1	a
2016	5945	Steak haché	Ground beef	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	st	1	a
2016	5946	Steak haché	Ground beef	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2016	5947	Steak haché	Ground beef	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2016	5948	Haché pur boeuf surgelé	Frozen ground beef	st	st	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2016	5949	Steak haché surgelé	Frozen ground beef	-	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2016	5950	Steak haché surgelé	Frozen ground beef	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2016	5951	Biftek surgelé	Frozen beef trim	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a

♦ Analyses performed according to the COFRAC accreditation

RAW BEEF MEAT																												
Date	N° Sample	Product (French name)	Product	Reference method: ISO 16654 ♦					Alternative method: SureTect *E. coli* O157:H7 (7500 Fast PCR instrument)																	Category	Type
									BPW pre-warmed for 8 - 24h at 41.5°C																		
									Incubation time 8h							Incubation time 24h								IMS/ CT SMAC		
				IMS 6h		IMS 24h		Final Result	PCR 7500 Fast (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 8h	Agree-ment Ref/Alt	PCR 7500 Fast (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 24h	Agree-ment Ref/Alt			
				CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157																			
2016	**4426**	**Pavé de boeuf mariné à l'échalotte surgelé**	**Frozen marinated beef trim**	+p	+M	/	/	+	+(27,50/28,32)	+p	+	+	+	+	**PA**	+(25,41/26,56)	+p	+	+	+	+	**PA**		1	b
2016	**4428**	**Steak haché à l'oignon surgelé**	**Frozen seasoned ground beef**	+M	+M	/	/	+	+(25,77/28,00)	+M	+	+	+	+	**PA**	+(25,53/28,13)	+M	+	+	+	+	**PA**		1	b
2016	**4429**	**Steak haché à l'oignon surgelé**	**Frozen seasoned ground beef**	+p	+M	/	/	+	+(26,43/32,18)	+M	+	+	+	+	**PA**	+(26,78/32,17)	+M	+	+	+	+	**PA**		1	b
2016	**4589**	**Rumsteack échalotte**	**Marinated beef trim**	+M	+M	/	/	+	+(29,28/29,87)	+1/2	+	+	+	+	**PA**	+(22,62/23,69)	+1/2	+	+	+	+	**PA**		1	b
2016	**4590**	**Rumsteak 3 poivres**	**Seasoned beef trim**	+p	+M	/	/	+	+(27,98/29,75)	+M	+	+	+	+	**PA**	+(23,98/25,89)	+M	+	+	+	+	**PA**		1	b
2016	**4592**	**Steak haché Bolognaise**	**Seasoned ground beef**	+M	+M	/	/	+	+(26,21/29,09)	+1/2	+	+	+	+	**PA**	+(23,67/27,06)	+p	+	+	+	+	**PA**		1	b
2016	**4593**	**Carpaccio olive**	**Carpaccio olive**	+p	+p	/	/	+	+(26,95/27,54)	+p	+	+	+	+	**PA**	+(20,89/21,71)	+p	+	+	+	+	**PA**		1	b
2016	**4594**	**Carpaccio parmesan**	**Carpaccio cheese**	+p	+p	/	/	+	+(26,19/27,03)	+p	+	+	+	+	**PA**	+(22,35/23,41)	+p	+	+	+	+	**PA**		1	b
2016	**4595**	**Carpaccio basilic**	**Carpaccio basilic**	+p	+p	/	/	+	+(27,43/28,15)	+p	+	+	+	+	**PA**	+(21,24/22,24)	+M	+	+	+	+	**PA**		1	b
2016	**4596**	**Carpaccio parmesan**	**Carpaccio cheese**	st	st	st	st	-	+(29,18/29,99)	+p	+	+	+	+	**PD**	+(21,88/22,80)	+p	+	+	+	+	**PD**		1	b
2016	**4597**	**Carpaccio pistou**	**Carpaccio pistou**	+p	+p	/	/	+	+(27,60/28,22)	+M	+	+	+	+	**PA**	+(22,96/24,14)	+M	+	+	+	+	**PA**		1	b
2016	**4598**	**Carpaccio noisette**	**Carpaccio hazelnut**	+p	+p	/	/	+	+(32,37/32,84)	+p	+	+	+	+	**PA**	+(22,20/23,32)	+p	+	+	+	+	**PA**		1	b
2016	**4865**	**Steak haché à la bolognaise 15% MG**	**Seasoned ground beef**	+p	+M	/	/	+	+(29,11/31,02)	+M	+	+	+	+	**PA**	+(23,33/25,89)	+M	+	+	+	+	**PA**		1	b
2016	5934	Pavé de bœuf aux 3 poivres	Seasoned beef trim	st	st	st	-	-	-/-	st				-	**NA**	-/-	-				-	**NA**	st	1	b
2016	5935	Rumsteak à l'échalotte	Seasoned beef trim	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b
2016	5936	Rumsteak aux 3 poivres	Seasoned beef trim	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b
2016	5937	Carpaccio aux olives	Carpaccio olive	st	-	st	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b
2016	5938	Carpaccio	Carpaccio	-	st	st	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b
2016	5939	Carpaccio pistou	Carpaccio pistou	-	st	st	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b
2016	5940	Carpaccio noisette	Carpaccio hazelnut	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b

RAW BEEF MEAT																												
Date	N° Sample	Product (French name)	Product	Reference method: ISO 16654 ♦					Alternative method: SureTect *E. coli* O157:H7 (7500 Fast PCR instrument)																	Category	Type
									BPW pre-warmed for 8 - 24h at 41.5°C																		
									Incubation time 8h							Incubation time 24h								IMS/ CT SMAC		
				IMS 6h		IMS 24h		Final Result	PCR 7500 Fast (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 8h	Agree-ment Ref/Alt	PCR 7500 Fast (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 24h	Agree-ment Ref/Alt			
				CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157																				
2016	5941	Viande hachée à la bolognaise	Seasoned ground beef	st	st	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	st	1	b
2016	5953	Steak haché à l'oignon surgelé	Frozen seasoned ground beef	st	-	st	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b
2016	**4424**	**Bavette d'aloyau surgelée**	**Frozen beef trim**	+p	+p	/	/	+	+(28,49/29,28)	+p	+	+	+	+	**PA**	+(22,56/23,46)	+p	+	+	+	+	**PA**		1	c
2016	**4425**	**Bavette d'aloyau surgelée**	**Frozen beef trim**	+p	+p	/	/	+	+(28,20/28,96)	+p	+	+	+	+	**PA**	+(21,47/22,37)	+p	+	+	+	+	**PA**		1	c
2016	**4427**	**Biftek de charolais surgelé**	**Frozen beef trim**	+p	+M	/	/	+	+(27,23/28,36)	+p	+	+	+	+	**PA**	+(23,32/24,17)	+p	+	+	+	+	**PA**		1	c
2016	**4584**	**Steak à griller**	**Beef trim**	+M	+m	/	/	+	-/-	-				-	**ND**	-/-	-				-	**ND**	**-**	1	c
2016	**4585**	**Steak à griller**	**Beef trim**	+m	+m	/	/	+	+(31,68/33,24)	+p	+	+	+	+	**PA**	+(27,08/28,55)	+p	+	+	+	+	**PA**		1	c
2016	**4586**	**Faux filet**	**Beef trim**	st	-	-	-	-	-(34,29/)	-				-	**NA**	- (24,34/)	-				-	**NA**		1	c
2016	**4587**	**Rumsteack**	**Beef trim**	+M	+M	/	/	+	+(33,11/34,02)	+p	+	+	+	+	**PA**	+(22,84/24,02)	+p	+	+	+	+	**PA**		1	c
2016	**4588**	**Tournedos**	**Beef trim**	+p	+M	/	/	+	-/-	-				-	**ND**	-/-	-				-	**ND**	**st**	1	c
2016	**4864**	**Carpaccio pur bœuf**	**Carpaccio**	st	st	st	-	-	-/-	st				-	**NA**	-/-	-				-	**NA**	**st**	1	c
2016	5927	Viande bovine à pot-au-feu	Beef trim	st	-	st	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	st	1	c
2016	5928	Steak à griller	Beef trim	st	-	st	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2016	5929	Bavette d'aloyau	Beef trim	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2016	5930	Rumsteak tournedos	Beef trim	-	-	-	+d(1: indol-)	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2016	5931	Bourguignon	Beef trim	-	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2016	5932	Bavette de flanchet	Beef trim	-	+md (indol -)	-	+md (indol -)	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2016	5933	Faux filet à griller	Beef trim	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2016	5952	Bavette d'Aloyau à griller surgelé	Frozen beef trim	st	-	st	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2019	3333	Viande bovine pièce à fondue	Beef trim	-	+md (auto +)	-	+m (indol -)	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2019	3334	Steak à griller	Beef trim	-	+2d (indol -)	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2019	3335	Bavette d'Aloyau à griller	Beef trim	st	-	+1 (auto +)	+md (indol -)	-	-/-	+M	-	-	-	-	**NA**	-/-	-				-	**NA**	-	1	c

RAW BEEF MEAT																			
				Reference method: ISO 16654 ♦	Alternative method: SureTect *E. coli* O157:H7 (7500 Fast PCR instrument)														
					BPW for 8 - 24h at 41.5°C + 72 h at 5°C ± 3°C														
					Incubation time 8h						Incubation time 24h								
Date	N° Sample	Product (French name)	Product	Final Result	PCR (Ct target 1 / Ct target 2) Result	CT-SMAC	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 8h / 72h	Agreement Ref/Alt 72H	PCR (Ct target 1 /Ct target 2) Result	CT-SMAC	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 24h / 72h	Agreement Ref/Alt 72 h	Category	Type
2016	**4430**	**Steak kaché <15% MG surgelé**	**Frozen ground beef**	+	+(29,14/30,13)	+M	+	+	+	**PA**	+(26,82/27,52)	+M	+	+	+	**PA**	1	a
2016	**4431**	**Steak kaché <15% MG**	**Frozen ground beef**	+	+(31,14/32,14)	+p	+	+	+	**PA**	+(29,36/30,46)	+p	+	+	+	**PA**	1	a
2016	**4591**	**Haché frais**	**Ground beef**	+	+(26,00/27,01)	+M	+	+	+	**PA**	+(25,78/26,62)	+M	+	+	+	**PA**	1	a
2016	**4856**	**Steak haché surgelé**	**Frozen ground beef**	+	+(24,35/36,30)	+1/2	+	+	+	**PA**	+(22,06/29,35)	+1/2	+	+	+	**PA**	1	a
2016	**4857**	**Steak haché surgelé**	**Frozen ground beef**	+	+(29,93/31,05)	+M	+	+	+	**PA**	+(24,92/25,76)	+M	+	+	+	**PA**	1	a
2016	**4858**	**Egréné de bœuf surgelé 15% MG**	**Frozen ground beef**	+	+(29,83/)	-			-	**ND**	+(23,20/)	-			-	**ND**	1	a
2016	**4859**	**Egréné de bœuf surgelé 15% MG**	**Frozen ground beef**	+	+(27,57/28,69)	+M	+	+	+	**PA**	+(23,77/24,65)	+M	+	+	+	**PA**	1	a
2016	**4860**	**Steak haché frais 5% MG**	**Ground beef**	+	+(26,65/27,80)	+1/2	+	+	+	**PA**	+(26,57/27,77)	+1/2	+	+	+	**PA**	1	a
2016	**4861**	**Steak haché**	**Ground beef**	+	+(26,09/27,04)	+M	+	+	+	**PA**	+(25,76/26,58)	+m	+	+	+	**PA**	1	a
2016	**4863**	**Steak haché 8% MG**	**Ground beef**	+	+(25,36/27,90)	+1/2	+	+	+	**PA**	+(24,99/27,12)	+m	+	+	+	**PA**	1	a
2016	**4426**	**Pavé de boeuf mariné à l'échalotte surgelé**	**Frozen marinated beef trim**	+	+(27,22/28,31)	+p	+	+	+	**PA**	+(27,45/28,35)	+p	+	+	+	**PA**	1	b
2016	**4428**	**Steak haché à l'oignon surgelé**	**Frozen seasoned ground beef**	+	+(26,20/28,52)	+M	+	+	+	**PA**	+(25,84/28,57)	+M	+	+	+	**PA**	1	b
2016	**4429**	**Steak haché à l'oignon surgelé**	**Frozen seasoned ground beef**	+	+(28,16/33,63)	+M	+	+	+	**PA**	+(27,26/32,91)	+m	+	+	+	**PA**	1	b
2016	**4589**	**Rumsteack échalotte**	**Marinated beef trim**	+	+(28,59/29,70)	+1/2	+	+	+	**PA**	+(25,17/26,22)	+m	+	+	+	**PA**	1	b
2016	**4590**	**Rumsteak 3 poivres**	**Seasoned beef trim**	+	+(27,48/29,87)	+M	+	+	+	**PA**	+(26,33/28,56)	+p	+	+	+	**PA**	1	b
2016	**4592**	**Steak haché Bolognaise**	**Seasoned ground beef**	+	+(26,83/29,68)	+p	+	+	+	**PA**	+(26,49/29,25)	+M	+	+	+	**PA**	1	b
2016	**4593**	**Carpaccio olive**	**Carpaccio olive**	+	+(27,11/28,05)	+M	+	+	+	**PA**	+(22,55/23,44)	+M	+	+	+	**PA**	1	b
2016	**4594**	**Carpaccio parmesan**	**Carpaccio cheese**	+	+(27,11/28,05)	+p	+	+	+	**PA**	+(23,39/24,42)	+M	+	+	+	**PA**	1	b
2016	**4595**	**Carpaccio basilic**	**Carpaccio basilic**	+	+(27,16/28,15)	+p	+	+	+	**PA**	+(23,03/24,02)	+M	+	+	+	**PA**	1	b
2016	**4596**	**Carpaccio parmesan**	**Carpaccio cheese**	-	+(29,50/30,48)	+M	+	+	+	**PD**	+(22,75/23,83)	+p	+	+	+	**PD**	1	b
2016	**4597**	**Carpaccio pistou**	**Carpaccio pistou**	+	+(27,62/28,54)	+p	+	+	+	**PA**	+(23,11/24,36)	+M	+	+	+	**PA**	1	b
2016	**4598**	**Carpaccio noisette**	**Carpaccio hazelnut**	+	+(31,58/32,36)	+p	+	+	+	**PA**	+(22,49/23,64)	+p	+	+	+	**PA**	1	b
2016	**4865**	**Steak haché à la bolognaise 15% MG**	**Seasoned ground beef**	+	+(27,36/30,00)	+M	+	+	+	**PA**	+(24,56/26,85)	+M	+	+	+	**PA**	1	b
2016	**4424**	**Bavette d'aloyau surgelée**	**Frozen beef trim**	+	+(30,90/32,15)	+p	+	+	+	**PA**	+(24,27/25,23)	+p	+	+	+	**PA**	1	c
2016	**4425**	**Bavette d'aloyau surgelée**	**Frozen beef trim**	+	+(28,06/29,31)	+p	+	+	+	**PA**	+(23,87/24,81)	+p	+	+	+	**PA**	1	c
2016	**4427**	**Biftek de charolais surgelé**	**Frozen beef trim**	+	+(28,17/29,22)	+p	+	+	+	**PA**	+(23,31/24,42)	+M	+	+	+	**PA**	1	c
2016	**4584**	**Steak à griller**	**Beef trim**	+	-/-	-			-	**ND**	-/-	-			-	**ND**	1	c
2016	**4585**	**Steak à griller**	**Beef trim**	+	+(33,02/34,13)	+p	+	+	+	**PA**	+(27,70/29,06)	+M	+	+	+	**PA**	1	c
2016	**4587**	**Rumsteack**	**Beef trim**	+	+(31,55/32,83)	+M	+	+	+	**PA**	+(24,43/25,21)	+M	+	+	+	**PA**	1	c
2016	**4588**	**Tournedos**	**Beef trim**	+	-/-	-			-	**ND**	-/-	-			-	**ND**	1	c

♦ Analyses performed according to the COFRAC accreditation

RAW BEEF MEAT																										
				Reference method: ISO 16654♦					Alternative method: SureTect *E. coli* O157:H7 (QS5 PCR instrument)																	
									BPW pre-warmed for 8 - 24h at 41.5°C																	
									Incubation time 8h							Incubation time 24h										
				IMS 6h		IMS 24h																				
Date	N° Sample	Product (French name)	Product	CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157	Final Result	PCR QS5 (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 8h	Agree-ment Ref/Alt	PCR QS5 (Ct target 1 / Ct target 2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 24h	Agree-ment Ref/Alt	IMS/ CT SMAC	Category	Type
2019	**3312**	**Steak haché frais 15% MG**	**Ground beef**	-	+m	-	+1d (indol -)	-	+(31,55/31,71)	+M	+	+	+	+	**PD**	+(24,28/24,64)	+p	+	+	+	+	**PD**		1	a
2019	**3313**	**Steak haché frais 15% MG**	**Ground beef**	st	-	-	+2d (Latex -)	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2019	**3314**	**Steak haché frais 5% MG**	**Ground beef**	+p	+p	/	/	+	-/-	-				-	**ND**	-/-	-				-	**ND**	-	1	a
2019	**3315**	**Steak haché frais 5% MG**	**Ground beef**	+p	+p	/	/	+	+(33,90/34,38)	+p	+	+	+	+	**PA**	+(22,96/23,23)	+p	+	+	+	+	**PA**		1	a
2019	**3316**	**Haché de bœuf frais**	**Ground beef**	+p	+p	/	/	+	+(29,32/29,29)	+p	+	+	+	+	**PA**	+(23,48/23,78)	+p	+	+	+	+	**PA**		1	a
2019	3330	Steak haché frais	Ground beef	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2019	3331	Steak haché frais 5% MG	Ground beef	st	st	-	-	-	-/-	+Md (NC on TSA)				-	**NA**	-/-	-				-	**NA**	-	1	a
2019	3332	Haché de bœuf frais	Ground beef	st	-	st	-	-	-/-	st				-	**NA**	-/-	-				-	**NA**	-	1	a
2019	**3296**	**Haché de bœuf 20 % MG surgelé**	**Frozen ground beef**	+p	+M	/	/	+	+(41,28)/ +(38,27)	-/+p after IMS	+	+/+	+	+	**PA**	+(33,08)/ +(32,80)	-/+m after IMS	+	+/+	+	+	**PA**	+m	1	a
2019	**3297**	**Haché de bœuf 20 % MG surgelé**	**Frozen ground beef**	+p	+p	/	/	+	-/-	+md		auto		-	**ND**	-/-	-				-	**ND**	-	1	a
2019	**3298**	**Steaks hachés pur bœuf 15% MG surgelé**	**Frozen ground beef**	+p	+M	/	/	+	-/-	+md		auto		-	**ND**	-/-	-				-	**ND**	-	1	a
2019	**3299**	**Steaks hachés surgelés**	**Frozen ground beef**	+p	+p	/	/	+	+(31,53)/+(31,73)	+p	+	+/+	+	+	**PA**	+(23,68)/ +(23,94)	+p	+	+/+	+	+	**PA**		1	a
2019	**3300**	**Steaks hachés surgelés**	**Frozen ground beef**	st	st	st	-	-	+(37,90)/ +(36,41)	+M	+	+/+	+	+	**PD**	+(29,86)/ +(30,31)	+1/2	+	+/+	+	+	**PD**		1	a
2019	**4497**	**Steak haché frais pur boeuf**	**Ground beef**	-	-	-	+d(2)	-	-/-	+md (NC on TSA)				-	**NA**	-/-	-				-	**NA**	-	1	a
2019	**4498**	**Steak haché pur bœuf**	**Ground beef**	st	-	-	-	-	+(22,97)/ +(23,84)	+M	+	+/+	+	+	**PD**	+(21,81)/+(23,12)	+Md	+	+/+	+	+	**PD**		1	a

♦ Analyses performed according to the COFRAC accreditation

RAW BEEF MEAT																										
				Reference method: ISO 16654♦					Alternative method: SureTect *E. coli* O157:H7 (QS5 PCR instrument)																	
									BPW pre-warmed for 8 - 24h at 41.5°C																	
									Incubation time 8h							Incubation time 24h										
				IMS 6h		IMS 24h																				
Date	N° Sample	Product (French name)	Product	CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157	Final Result	PCR QS5 (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 8h	Agree-ment Ref/Alt	PCR QS5 (Ct target 1 / Ct target 2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 24h	Agree-ment Ref/Alt	IMS/ CT SMAC	Category	Type
2019	4515	Steak haché frais pur boeuf	Ground beef	st	-	-	+d(2)	-	-/-	+md (NC on TSA)				-	**NA**	-/-	-				-	**NA**	-	1	a
2019	4516	Steak haché pur bœuf	Ground beef	st	-	st	-	-	+(23,81)/-	+d(2)	-	-	-	-	**NA**	+(21,50)/-	-				-	**NA**	-	1	a
2019	5853	Steak haché	Ground beef	st	-	st	-	-	-/-	st				-	**NA**	-/-	-				-	**NA**	-	1	a
2019	5854	Bifteck haché	Ground beef	st	-	st	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2019	5855	Bifteck haché	Ground beef	st	st	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	a
2019	**3322**	**Pavé de rumsteak aux 3 poivres**	**Seasoned beef trim**	+p	+p	/	/	+	+(30,42/30,61)	+p	+	+	+	+	**PA**	+(26,82/27,34)	+p	+	+	+	+	**PA**		1	b
2019	**3323**	**Pavé de rumsteak aux 3 poivres**	**Seasoned beef trim**	+p	+p	/	/	+	-/-	+md (NC on TSA)				-	**ND**	-/-	-				-	**ND**	-	1	b
2019	**3324**	**Haché de bœuf bolognaise**	**Seasoned ground beef**	+p	+p	/	/	+	+(29,21/28,97)	+p	+	+	+	+	**PA**	+(22,72/22,72)	+M	+	+	+	+	**PA**		1	b
2019	**3326**	**Carpaccio au basilic**	**Basilic carpaccio**	st	st	st	-	-	-(49,89/-)	st				-	**NA**	-/-	st				-	**NA**	-	1	b
2019	**3329**	**Pavé de rumsteak à l'échalotte**	**Seasoned beef trim**	+p	+M	/	/	+	+(26,01/25,77)	+p	+	+	+	+	**PA**	+(20,80/20,96)	+M	+	+	+	+	**PA**		1	b
2019	3336	Pavé de rumsteak aux 3 poivres	Seasoned beef trim	st	st	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b
2019	3337	Haché de bœuf bolognaise	Seasoned ground beef	st	st	+m (auto +)	+M (Latex -)	-	-/-	+md (NC on TSA)				-	**NA**	-/-	-				-	**NA**	-	1	b
2019	3338	Carpaccio au basilic	Basilic carpaccio	st	st	st	st	-	-/-	st				-	**NA**	-/-	st				-	**NA**	-	1	b
2019	3339	Pavé de rumsteak à l'échalotte	Seasoned beef trim	st	-	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b
2019	3340	Carpaccio au basilic	Basilic carpaccio	st	st	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b
2019	**3293**	**Boulettes au bœuf à l'oignon surgelées**	**Frozen seasoned ground beef**	st	-	st	-	-	+(28,52)/+(29,11)	+M	+	+/+	+	+	**PD**	+(25,79)/+(26,97)	+M	+	+/+	+	+	**PD**		1	b

RAW BEEF MEAT																											
				Reference method: ISO 16654♦					Alternative method: SureTect *E. coli* O157:H7 (QS5 PCR instrument)																		
									BPW pre-warmed for 8 - 24h at 41.5°C																		
									Incubation time 8h							Incubation time 24h											
				IMS 6h		IMS 24h																					
Date	N° Sample	Product (French name)	Product	CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157	Final Result	PCR QS5 (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 8h	Agree-ment Ref/Alt	PCR QS5 (Ct target 1 / Ct target 2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 24h	Agree-ment Ref/Alt	IMS/ CT SMAC	Category	Type
2019	**3294**	**Boulettes au bœuf à l'oignon surgelées**	**Frozen seasoned ground beef**	+p	+M	/	/	+	+(26,92)/+(26,93)	+M	+	+/+	+	+	**PA**	+(23,97)/+(23,85)	+M	+	+/+	+	+	**PA**		1	b
2019	**3295**	**Viande de bœuf burger épicée surgelée**	**Frozen seasoned ground beef**	st	st	st	-	-	+(29,05)/+(28,99)	+M	+	+/+	+	+	**PD**	+(25,93)/+(25,95)	+1/2	+	+/+	+	+	**PD**		1	b
2019	**5848**	**Haché bolognaise**	**Seasoned ground beef**	+p	+M	/	/	+	+(26,57)/+(26,71)	+M	+	+/+	+	+	**PA**	+(22,99)/+(22,98)	+M	+	+/+	+	+	**PA**		1	b
2019	**5849**	**Haché bolognaise**	**Seasoned ground beef**	+p	+M	/	/	+	+(27,77)/+(27,99)	+M	+	+/+	+	+	**PA**	+(26,02)/+(26,16)	+M	+	+/+	+	+	**PA**		1	b
2019	**5850**	**Steak haché à l'oignon**	**Seasoned ground beef**	+p	+p	/	/	+	+(25,89)/+(25,91)	+M	+	+/+	+	+	**PA**	+(20,96)/+(21,41)	+M	+	+/+	+	+	**PA**		1	b
2019	**5851**	**Steak haché à l'oignon**	**Seasoned ground beef**	+p	+p	/	/	+	+(25,10)/+(25,07)	+M	+	+/+	+	+	**PA**	+(21,44)/+(21,65)	+M	+	+/+	+	+	**PA**		1	b
2019	**5852**	**Carpaccio marinade à la mangue**	**Marinated beef trim**	+p	+p	/	/	+	+(27,96)/+(28,09)	+M	+	+/+	+	+	**PA**	+(20,38)/+(20,35)	+M	+	+/+	+	+	**PA**		1	b
2019	5856	Pavé de bœuf mariné à l'échalotte	Marinated beef trim	-	-	st	-	-	-/-	st				-	**NA**	-/+(39,32)	st				-	**NA**	-	1	b
2019	5857	Carpaccio de bœuf marinade au pistou	Marinated beef trim	-	-	st	-	-	-/-	-				-	**NA**	-/-	st				-	**NA**	-	1	b
2019	6095	Tartare de viande bovine et sa sauce	Marinated beef trim	st	st	st	st	-	-/-	st				-	**NA**	-/-	-				-	**NA**	-	1	b
2019	6096	Viande bovine hachée bolognaise	Seasoned ground beef	st	-	st	+Md (Latex-)	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	b
2019	**3317**	**Viande bovine pièce à fondue**	**Beef trim**	+M	+M	/	/	+	+(27,40/26,97)	+M	+	+	+	+	**PA**	+(23,04/22,96)	+p	+	+	+	+	**PA**		1	c
2019	**3318**	**Viande bovine pièce à fondue**	**Beef trim**	-	+md	+Md	+md (indol -)	-	-/-	+md	-	auto	auto	-	**NA**	+(34,53/34,52)	+(2)	+	+	+	+	**PD**		1	c

RAW BEEF MEAT																										
				Reference method: ISO 16654♦					Alternative method: SureTect *E. coli* O157:H7 (QS5 PCR instrument)																	
									BPW pre-warmed for 8 - 24h at 41.5°C																	
									Incubation time 8h							Incubation time 24h										
				IMS 6h		IMS 24h																				
Date	N° Sample	Product (French name)	Product	CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157	Final Result	PCR QS5 (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 8h	Agree-ment Ref/Alt	PCR QS5 (Ct target 1 / Ct target 2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 24h	Agree-ment Ref/Alt	IMS/ CT SMAC	Category	Type
2019	**3319**	**Steak à griller**	**Beef trim**	+m	+md	+M	+M (Latex -)	-	-/-	+md(3)	-	auto	auto	-	**NA**	-/-	-				-	**NA**	-	1	c
2019	**3320**	**Steak à griller**	**Beef trim**	+p	+p	/	/	+	-/-	+md(2)	-	-	-	-	**ND**	-/-	-				-	**ND**	-	1	c
2019	**3321**	**Bavette d'Aloyau à griller**	**Beef trim**	+M	+M	/	/	+	+(29,82/29,77)	+M	+	+	+	+	**PA**	+(24,45/24,78)	+M	+	+	+	+	**PA**		1	c
2019	3333	Viande bovine pièce à fondue	Beef trim	-	+md (auto +)	-	+m (indol -)	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2019	3334	Steak à griller	Beef trim	-	+2d (indol -)	-	-	-	-/-	-				-	**NA**	-/-	-				-	**NA**	-	1	c
2019	3335	Bavette d'Aloyau à griller	Beef trim	st	-	+1 (auto +)	+md (indol -)	-	-/-	+M	-	-	-	-	**NA**	-/-	-				-	**NA**	-	1	c
2019	**3301**	**Pavé de rumsteak surgelé**	**Frozen beef trim**	+p	+p	/	/	+	+(43,46)/+(38,42)	+(3 col)	+	+/+	+	+	**PA**	+(21,31)/+(21,40)	+p	+	+/+	+	+	**PA**		1	c
2019	**3302**	**Pavé de rumsteak surgelé**	**Frozen beef trim**	st	st	st	st	-	-/-	st				-	**NA**	-/-	st				-	**NA**	st	1	c
2019	**3303**	**Entrecôte surgelée**	**Frozen beef trim**	+p	+p	/	/	+	+(33,34)/+(33,89)	+p	+	+/+	+	+	**PA**	+(22,69)/+(22,09)	+M	+	+/+	+	+	**PA**		1	c
2019	**3304**	**Effeuillés de bœuf surgelés**	**Frozen beef trim**	+p	+p	/	/	+	+(31,80)/+(31,02)	+p	+	+/+	+	+	**PA**	+(24,03)/+(23,31)	+M	+	+/+	+	+	**PA**		1	c
2019	**3305**	**Effeuillés de bœuf surgelés**	**Frozen beef trim**	st	+(1)	+p	+m	+	+(29,06)/+(28,78)	+p	+	+/+	+	+	**PA**	+(22,92)/+(22,72)	+M	+	+/+	+	+	**PA**		1	c
2019	**4499**	**Viande bovine bourguignon**	**Beef trim**	st	-	+p	+M	+	-/-	st				-	**ND**	-/-	-				-	**ND**	-	1	c
2019	**4500**	**Viande bovine steak à griller**	**Beef trim**	+pd	-	+pd	-	-	-/-	+p	-	-	-	-	**NA**	-/-	+p	-	-	-	-	**NA**	+p (latex-)	1	c
2019	**4501**	**Viande bovine entrecôte à griller**	**Beef trim**	+p	+M	/	/	+	-/+(49,14)	+m	+	-	-	-	**ND**	-/-	-				-	**ND**	-	1	c
2019	4517	Viande bovine bourguignon	Beef trim	st	-	st	-	-	-/-	st				-	**NA**	-/-	-				-	**NA**	-	1	c

RAW BEEF MEAT																										
Date	N° Sample	Product (French name)	Product	Reference method: ISO 16654♦					Alternative method: SureTect *E. coli* O157:H7 (QS5 PCR instrument)																Category	Type
									BPW pre-warmed for 8 - 24h at 41.5°C																	
									Incubation time 8h							Incubation time 24h										
				IMS 6h		IMS 24h																				
				CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157	Final Result	PCR QS5 (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 8h	Agree-ment Ref/Alt	PCR QS5 (Ct target 1 / Ct target 2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 24h	Agree-ment Ref/Alt	IMS/ CT SMAC		
2019	4518	Viande bovine steak à griller	Beef trim	+pd	-	+M	-	-	-/-	+pd	-	-	-	-	**NA**	-/-	+M	-	-	-	-	**NA**	-	1	c
2019	4519	Viande bovine entrecôte à griller	Beef trim	st	-	st	-	-	-/-	+pd (NC on TSA)				-	**NA**	-/-	-				-	**NA**	-	1	c
2019	4520	Viande bovine pavé à griller	Beef trim	st	-	st	-	-	-/-	st				-	**NA**	-/-	st				-	**NA**	-	1	c

RAW BEEF MEAT																		
Date	N° Sample	Product (French name)	Product	Reference method: ISO 16654♦	Alternative method: SureTect *E. coli* O157:H7 (QS5 PCR instrument)												Category	Type
					BPW for 8 - 24 h at 41.5°C + 72 h at 5°C ± 3°C													
					Incubation time 8h						Incubation time 24h							
				Final Result	PCR QS5 (Ct target 1 / Ct target 2) Result	CT-SMAC	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 8h / 72h	Agree-ment Ref/Alt 72H	PCR QS5 (Ct target 1 / Ct target 2) Result	CT-SMAC	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 24h / 72h	Agreement Ref/Alt 72H		
2019	**3312**	**Steak haché frais 15% MG**	**Ground beef**	-	+(28,45/28,75)	+M	+	+	+	**PD**	+(24,33/24,4)	+M	+	+	+	**PD**	1	a
2019	**3313**	**Steak haché frais 15% MG**	**Ground beef**	-	-/-	-			-	**NA**	-/-	-			-	**NA**	1	a
2019	**3314**	**Steak haché frais 5% MG**	**Ground beef**	+	-/-	-			-	**ND**	-/-	-			-	**ND**	1	a
2019	**3315**	**Steak haché frais 5% MG**	**Ground beef**	+	+(30,61/31,10)	+p	+	+	+	**PA**	+(23,08)/23,19)	+M	+	+	+	**PA**	1	a
2019	**3316**	**Haché de bœuf frais**	**Ground beef**	+	+(26,16/26,20)	+p	+	+	+	**PA**	+(24,53/24,14)	+M	+	+	+	**PA**	1	a
2019	**3296**	**Haché de bœuf 20 % MG surgelé**	**Frozen ground beef**	+	+(49,83)/+(42,12)	-/+m after IMS	+	+	+	**PA**	+(32,22)/+(32,90)	+m	+	+	+	**PA**	1	a
2019	**3297**	**Haché de bœuf 20 % MG surgelé**	**Frozen ground beef**	+	-/-	-			-	**ND**	-/-	-			-	**ND**	1	a
2019	**3298**	**Steaks hachés pur bœuf 15% MG surgelé**	**Frozen ground beef**	+	-/-	-			-	**ND**	-/-	-			-	**ND**	1	a
2019	**3299**	**Steaks hachés surgelés**	**Frozen ground beef**	+	+(30,99)/+(31,22)	+p	+	+	+	**PA**	+(23,40)/+(23,46)	+p	+	+	+	**PA**	1	a
2019	**3300**	**Steaks hachés surgelés**	**Frozen ground beef**	-	+(34,74)/+(35,51)	+m	+	+	+	**PD**	+(29,04)/+(28,91)	+1/2	+	+	+	**PD**	1	a
2019	**4497**	**Steak haché frais pur boeuf**	**Ground beef**	-	-/-	-			-	**NA**	-/-	-			-	**NA**	1	a
2019	**4498**	**Steak haché pur bœuf**	**Ground beef**	-	+(27,84)/+(30,55)	+M	+	+	+	**PD**	+(22,10)/+(23,86)	+M	+	+	+	**PD**	1	a
2019	4515	Steak haché frais pur boeuf	Ground beef	-	-/-	-			-	**NA**	-/-	-			-	**NA**	1	a
2019	4516	Steak haché pur bœuf	Ground beef	-	+(26,04)/-	-			-	**NA**	+(24,84)/-	-			-	**NA**	1	a
2019	**3322**	**Pavé de rumsteak aux 3 poivres**	**Seasoned beef trim**	+	+(28,45/28,79)	+M	+	+	+	**PA**	+(28,95/29,00)	+M	+	+	+	**PA**	1	b
2019	**3323**	**Pavé de rumsteak aux 3 poivres**	**Seasoned beef trim**	+	-/-	+1/2d	auto	auto	-	**ND**	-/-	-			-	**ND**	1	b
2019	**3324**	**Haché de bœuf bolognaise**	**Seasoned ground beef**	+	+(25,13/24,96)	+1/2	+	+	+	**PA**	+(23,59/23,61)	+1/2	+	+	+	**PA**	1	b
2019	**3326**	**Carpaccio au basilic**	**Basilic carpaccio**	-	-/-	-			-	**NA**	-/-	st			-	**NA**	1	b
2019	**3329**	**Pavé de rumsteak à l'échalotte**	**Seasoned beef trim**	+	+(23,54/23,30)	+M	+	+	+	**PA**	+(21,38/21,29)	+M	+	+	+	**PA**	1	b
2019	3337	Haché de bœuf bolognaise	Seasoned ground beef	-	-/-	+md	auto	auto	-	**NA**	-/-	+Md	-	-	-	**NA**	1	b
2019	**3293**	**Boulettes au bœuf à l'oignon surgelées**	**Frozen seasoned ground beef**	-	+(27,33)/+(28,42)	+M	+	+	+	**PD**	+(24,78)/+(25,89)	+M	+	+	+	**PD**	1	b
2019	**3294**	**Boulettes au bœuf à l'oignon surgelées**	**Frozen seasoned ground beef**	+	+(25,93)/+(25,94)	+M	+	+	+	**PA**	+(24,32)/+(24,07)	+M	+	+	+	**PA**	1	b
2019	**3295**	**Viande de bœuf burger épicée surgelée**	**Frozen seasoned ground beef**	-	+(28,04)/+(28,44)	+M	+	+	+	**PD**	+(25,49)/+(25,51)	+M	+	+	+	**PD**	1	b
2019	**5848**	**Haché bolognaise**	**Seasoned ground beef**	+	+(26,21)/+(26,50)	+M	+/+	+	+	**PA**	+(23,05)/+(23,02)	+M	+/+	+	+	**PA**	1	b

♦ Analyses performed according to the COFRAC accreditation

RAW BEEF MEAT																		
Date	N° Sample	Product (French name)	Product	Reference method: ISO 16654♦	Alternative method: SureTect *E. coli* O157:H7 (QS5 PCR instrument)												Category	Type
					BPW for 8 - 24 h at 41.5°C + 72 h at 5°C ± 3°C													
					Incubation time 8h						Incubation time 24h							
				Final Result	PCR QS5 (Ct target 1 / Ct target 2) Result	CT-SMAC	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 8h / 72h	Agree-ment Ref/Alt 72H	PCR QS5 (Ct target 1 / Ct target 2) Result	CT-SMAC	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID Remel O157:H7 (directly on typical colony)	Final result 24h / 72h	Agreement Ref/Alt 72H		
2019	**5849**	**Haché bolognaise**	**Seasoned ground beef**	+	+(27,46)/+(27,79)	+M	+/+	+	+	**PA**	+(25,93)/+(26,10)	+M	+/+	+	+	**PA**	1	b
2019	**5850**	**Steak haché à l'oignon**	**Seasoned ground beef**	+	+(25,37)/+(25,64)	+M	+/+	+	+	**PA**	+(21,68)/+(21,77)	+M	+/+	+	+	**PA**	1	b
2019	**5851**	**Steak haché à l'oignon**	**Seasoned ground beef**	+	+(25,55)/+(25,73)	+M	+/+	+	+	**PA**	+(22,08)/+(22,01)	+M	+/+	+	+	**PA**	1	b
2019	**5852**	**Carpaccio marinade à la mangue**	**Marinated beef trim**	+	+(26,77)/+(26,88)	+M	+/+	+	+	**PA**	+(20,25)/+(20,35)	+M	+/+	+	+	**PA**	1	b
2019	**3317**	**Viande bovine pièce à fondue**	**Beef trim**	+	+(26,09/26,46)	+1/2	+	+	+	**PA**	+(24,36/24,28)	+1/2	+	+	+	**PA**	1	c
2019	**3318**	**Viande bovine pièce à fondue**	**Beef trim**	-	-/-	-			-	**NA**	+(33,52/33,78)	+(1)	+	+	+	**PD**	1	c
2019	**3319**	**Steak à griller**	**Beef trim**	-	-/-	-			-	**NA**	-/-	-			-	**NA**	1	c
2019	**3320**	**Steak à griller**	**Beef trim**	+	-/-	-			-	**ND**	-/-	-			-	**ND**	1	c
2019	**3321**	**Bavette d'Aloyau à griller**	**Beef trim**	+	+28,36/28,62)	+1/2	+	+	+	**PA**	+(26,69/26,37)	+1/2	+	+	+	**PA**	1	c
2019	3333	Viande bovine pièce à fondue	Beef trim	-	-/-	-					-/-	-			-	**NA**	1	c
2019	3334	Steak à griller	Beef trim	-	-/-	-					-/-	-			-	**NA**	1	c
2019	3335	Bavette d'Aloyau à griller	Beef trim	-	-/-	+md	-	-	-	**NA**	-/-	-			-	**NA**	1	c
2019	**3301**	**Pavé de rumsteak surgelé**	**Frozen beef trim**	+	+(45,50)/-/-/-/+(40,13)/+(38,07)/+(44,46)/-/+(44,47)/+(40,19)	+p	+	+	-	**ND**	+(21,19)/+(21,25)	+p	+	+	+	**PA**	1	c
2019	**3302**	**Pavé de rumsteak surgelé**	**Frozen beef trim**	-													1	c
2019	**3303**	**Entrecôte surgelée**	**Frozen beef trim**	+	+(32,15)/+(31,96)	+p	+	+	+	**PA**	+(21,54)/+(21,49)	+M	+	+	+	**PA**	1	c
2019	**3304**	**Effeuillés de bœuf surgelés**	**Frozen beef trim**	+	+(29,91)/+(29,80)	+M	+	+	+	**PA**	+(23,79)/+(23,92)	+M	+	+	+	**PA**	1	c
2019	**3305**	**Effeuillés de bœuf surgelés**	**Frozen beef trim**	+	+(27,19)/+(26,88)	+M	+	+	+	**PA**	+(21,97)/+(22,46)	+M	+	+	+	**PA**	1	c
2019	**4499**	**Viande bovine bourguignon**	**Beef trim**	+	-/-	st			-	**ND**	-/-	st			-	**ND**	1	c
2019	**4500**	**Viande bovine steak à griller**	**Beef trim**	-	-/-	-			-	**NA**	-/-	-			-	**NA**	1	c
2019	**4501**	**Viande bovine entrecôte à griller**	**Beef trim**	+	-/-	-			-	**ND**	-/-	st			-	**ND**	1	c
2019	4518	Viande bovine steak à griller	Beef trim	-	-/-	-			-	**NA**	-/-	-			-	**NA**	1	c
2019	4520	Viande bovine pavé à griller	Beef trim	-	-/-	st			-	**NA**	-/-	st			-	**NA**	1	c

(1) **protocol recommended in the IFU on page 23**

VEGETABLES																					
Date	N° Sample	Product (French name)	Product	Reference method: ISO 16654♦					Alternative method: SureTect *E. coli* O157:H7 (7500 Fast PCR / QS 5 PCR instruments) BPW for 20h at 41.5°C											Category	Type
				IMS 6h		IMS 24h		Final Result	PCR 7500Fast (target1/target2) Result	PCR QS5 (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 20h		Agreement Ref/Alt		IMS CT SMAC /20h		
				CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157								7500 Fast	QS5	7500 Fast	QS5			
2019	**4185**	**Graines germées radis**	**Sprouts (radish)**	-	-	-	-	-	+(35,80)/+(36,71)	-/+(45,19)	-(1)				-	-	**PPNA**	**PPNA**	-	2	a
2019	**4186**	**Fines pousses radis**	**Sprouts (radish)**	-	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	-	2	a
2019	**4187**	**Fines pousses poireaux**	**Sprouts (leeks)**	-	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	-	2	a
2019	**4188**	**Fines pousses poireaux**	**Sprouts (leeks)**	-	-	-	-	-	+(38,30)/+(33,58)	+(35,41)/+(34,49)	-(1)				-	-	**PPNA**	**PPNA**	-	2	a
2019	**4189**	**Fines pousses alfalfa**	**Sprouts (alfalfa)**	-	-	-	-	-	+(43,99)/+(37,69)	+(46,24)/+(39,61)	-(1)				-	-	**PPNA**	**PPNA**	-	2	a
2019	**4190**	**Fines pousses alfalfa**	**Sprouts (alfalfa)**	-	-	-	-	-	+(38,31)/+(37,33)	+(36,37)/+(38,56)	+(1)				+	+	**PD**	**PD**	-	2	a
2019	**4191**	**Fines pousses alfalfa, radis, fenouil**	**Sprouts (alfalfa, radish, fennel)**	-	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	-	2	a
2019	**4192**	**Fines pousses alfalfa, radis, fenouil**	**Sprouts (alfalfa, radish, fennel)**	-	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	-	2	a
2019	**4193**	**Fines pousses alfalfa lentilles poireau**	**Sprouts (alfalfa, lentils, fennel)**	-	-	-	-	-	+(35,46)/-	+(37,40)/-	-				-	-	**NA**	**NA**	-	2	a
2019	**4194**	**Fines pousses alfalfa lentilles poireau**	**Sprouts (alfalfa, lentils, fennel)**	+md	-	+1d	-	+	+(28,76)/-	+(30,97)/-	-				-	-	**ND**	**ND**	-	2	a
2019	**4503**	**Graines germées (poireaux, petits pois, betteraves, vitalfa)**	**Sprouts (leeks, peas, beets, vitalfa)**	+1d	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	-	2	a
2019	**4504**	**Graines germées (poireaux, petits pois, betteraves, vitalfa)**	**Sprouts (leeks, peas, beets, vitalfa)**	+1d	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	-	2	a
2019	**4505**	**Fines pousses (betteraves rouges)**	**Sprouts (beets)**	+md	-	-	-	-	-/-	-/+(43,46)	-				-	-	**NA**	**NA**	-	2	a
2019	**4506**	**Fines pousses (betteraves rouges)**	**Sprouts (beets)**	+1/2d	+1d	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	-	2	a
2019	**4507**	**Fines pousses (radis)**	**Sprouts (radish)**	-	-	+1/2	+Md	+	-/-	-/-	-				-	-	**ND**	**ND**	-	2	a
2019	**4508**	**Fines pousses (radis)**	**Sprouts (radish)**	-	-	-	-	-	+(44,30)/+(38,71)	+(41,74)/+(37,47)	-(1)				-	-	**PPNA**	**PPNA**	-	2	a
2019	**4509**	**Fines pousses (alfalfa, lentilles, poireaux)**	**Sprouts (alfalfa, lentils, leeks)**	-	-	+1d	-	+	-/-	-/-	-				-	-	**ND**	**ND**	-	2	a
2019	**4510**	**Fines pousses (alfalfa, lentilles, poireaux)**	**Sprouts (alfalfa, lentils, leeks)**	-	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	-	2	a
2019	**4511**	**Fines pousses (alfalfa)**	**Sprouts(alfalfa)**	-	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	-	2	a
2019	**4512**	**Fines pousses (alfalfa)**	**Sprouts(alfalfa)**	+1d	-	-	-	-	+(29,22)/-	+(29,13)/-	-				-	-	**NA**	**NA**	-	2	a
2019	**5797**	**Fines pousses alfalfa, lentilles poireaux**	**Sprouts (alfalfa, lentils, leeks)**	-	-	-	-	-	+(38,39)/+(36,95)	+(38,64)/+(39,02)	-(1)				-	-	**PPNA**	**PPNA**	-	2	a

♦ Analyses performed according to the COFRAC accreditation

VEGETABLES																					
Date	N° Sample	Product (French name)	Product	Reference method: ISO 16654♦					Alternative method: SureTect *E. coli* O157:H7 (7500 Fast PCR / QS 5 PCR instruments) BPW for 20h at 41.5°C											Category	Type
				IMS 6h		IMS 24h		Final Result	PCR 7500Fast (target1/target2) Result	PCR QS5 (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 20h		Agreement Ref/Alt		IMS CT SMAC /20h		
				CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157								7500 Fast	QS5	7500 Fast	QS5			
2019	**5798**	**Fines pousses alfalfa, lentilles poireaux**	**Sprouts (alfalfa, lentils, leeks)**	-	-	+md	+md	+	NLBL +(36,53)/ +(36,90)/NLBL+(43,36)*/ -*/+(37,89)/+(35,10)	+(35,96)/+(36,80)	+(1)	+	+/+	+	+	+	**PA**	**PA**		2	a
2019	**5799**	**Fines pousses alfalfa**	**Sprouts(alfalfa)**	+md	-	+md	+md	+	+(35,01)/+(36,80)	+(36,68)/+(38,29)	-(1)				-	-	**PPND**	**PPND**	**-**	2	a
2019	**5800**	**Fines pousses alfalfa**	**Sprouts(alfalfa)**	+md	-	+md	+md	+	+(28,11)/+(33,26)	+(28,90)/+(33,98)	+(1)	+	+/+	+	+	+	**PA**	**PA**		2	a
2019	**5801**	**Fines pousses alfalfa, lentilles poireaux**	**Sprouts (alfalfa, lentils, leeks)**	-	-	-	-	-	+(32,00)/+(34,98)	+(32,23)/+(36,04)	+(1)	+	+/+	+	+	+	**PD**	**PD**		2	a
2019	**5802**	**Fines pousses alfalfa**	**Sprouts(alfalfa)**	+md	-	+md	+md	+	+(33,31)/+(34,61)	+(33,36)/+(34,50)	-(1)				-	-	**PPND**	**PPND**	**-**	2	a
2019	**3306**	**Petit pois doux extra-fins surgelés**	**Frozen peas**	st	st	st	-	-	-/-	-/-	-				-	-	**NA**	**NA**	**-**	2	b
2019	**3307**	**Petit pois doux extra-fins surgelés**	**Frozen peas**	st	-	-	-	-	+(23,08)/+(23,01)	+(23,46)/+(23,48)	+M	+	+/+	+	+	+	**PD**	**PD**		2	b
2019	**3308**	**Haricots verts bio surgelés**	**Frozen green beans**	st	st	+p	+p	+	-/-	-/-	st				-	-	**ND**	**ND**	**-**	2	b
2019	**3309**	**Haricots verts bio surgelés**	**Frozen green beans**	st	st	st	-	-	+(20,08)/+(19,64)	+(19,64)/+(19,95)	+p	+	+/+	+	+	+	**PD**	**PD**		2	b
2019	**3310**	**Choux fleurs en fleurette surgelés**	**Frozen cauliflower**	+p	+p	/	/	+	+(23,31)/+(23,14)	+(23,76)/+(23,71)	+p	+	+/+	+	+	+	**PA**	**PA**		2	b
2019	**3311**	**Choux fleurs en fleurette surgelés**	**Frozen cauliflower**	+p	+p	/	/	+	+(22,57)/+(22,40)	+(23,02)/+(23,11)	+p	+	+/+	+	+	+	**PA**	**PA**		2	b
2019	**4195**	**Mâche**	**Baby leaves**	st	st	+pd	+Md	-	-/-	-/-	-				-	-	**NA**	**NA**	**-**	2	b
2019	**4196**	**Coriandre**	**Leafy greens (coriander)**	+p	+p	/	/	+	+(22,82)/+(22,64)	+(24,09)/+(24,28)	+p	+	+/+	+	+	+	**PA**	**PA**		2	b
2019	**4197**	**Persil plat**	**Leafy greens (parsley)**	-	-	-	-	-	+(28,41)/+(28,47)	+(31,35)/+(31,83)	+m	+	+/+	+	+	+	**PD**	**PD**		2	b
2019	**4198**	**Oseille**	**Leafy greens (sorrel)**	st	st	st	-	-	+(23,02)/+(22,82)	+(23,79)/+(23,96)	+M	+	+/+	+	+	+	**PD**	**PD**		2	b
2019	**4199**	**Oseille**	**Leafy greens (sorrel)**	st	st	-	-	-	+(23,18)/+(22,73)	+(24,73)/+(24,71)	+M	+	-/+	+	+	+	**PD**	**PD**		2	b
2019	**5803**	**Salade sucrine**	**Leafy greens (sucrine salad)**	+p	+M	/	/	+	+(28,86)/+(29,76)	+(29,36)/+(30,12)	+1/2	+	+/+	+	+	+	**PA**	**PA**		2	b
2019	**5804**	**Mâche**	**Leafy greens**	-	-	+m(NC on TSA)	-	-	NLBL+(22,40)/-/+(25,75)*/-*	+(23,11)/-	+md	-	-/-	-	-	-	**NA**	**NA**	**-**	2	b
2019	**5805**	**Cresson**	**Leafy greens (cress)**	+md	+m	+M	+Md	+	-/-	-/-	-				-	-	**ND**	**ND**	**-**	2	b
2019	5806	Mâche	Leafy greens	-	-	+md(NC on TSA)	-	-	+(22,95)/-	+(23,35)/-	+Md	-	-/-	-	-	-	**NA**	**NA**	**-**	2	b
2019	5807	Endive	Leafy greens (endive)	-	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	**-**	2	b
2019	5808	Salade sucrine	Leafy greens (sucrine salad)	-	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	**-**	2	b
2019	5809	Choux crurly Kalr	Leafy greens (cabbage)	st	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	**-**	2	b
2019	5810	Pourpier	Leafy greens	st	st	st	-	-	-/-	-/-	-				-	-	**NA**	**NA**	**-**	2	b
2019	5811	Chou blanc	Leafy greens (cabbage)	st	st	-	st	-	-/-	-/-	st				-	-	**NA**	**NA**	**-**	2	b

VEGETABLES																					
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				IMS 6h		IMS 24h		Final Result	PCR 7500Fast (target1/target2) Result	PCR QS5 (target1/ target2) Result	CT-SMAC	Indole	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 20h		Agreement Ref/Alt		IMS CT SMAC /20h		
				CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157								7500 Fast	QS5	7500 Fast	QS5			
2019	5812	Céleri blanc	Leafy greens (celery)	st	st	st	-	-	-/-	-/-	-				-	-	**NA**	**NA**	**-**	2	b
2019	**4200**	**Jus d'orange de méditerranée**	**Orange juice**	st	st	st	st	-	+(20,63)/+(20,32)	+(23,02)/+(23,04)	+p	+	+/+	+	+	+	**PD**	**PD**		2	c
2019	**4201**	**Jus mangue passion**	**Mango juice**	st	st	st	st	-	+(21,58)/+(21,38)	+(22,08)/+(22,00)	+p	+	+/+	+	+	+	**PD**	**PD**		2	c
2019	**4202**	**Jus d'orange framboise fraise**	**Raspberry strawberry juice**	st	st	st	st	-	-/-	-/-	st				-	-	**NA**	**NA**	**-**	2	c
2019	**4203**	**Jus d'orange bio**	**Orange juice**	+p	+p	/	/	+	+(21,63)/+(21,54)	+(21,46)/+(21,60)	+p	+	+/+	+	+	+	**PA**	**PA**		2	c
2019	**4204**	**Jus de pomme**	**Apple juice**	+p	+p	/	/	+	+(21,33)/+(21,15)	+(21,75)/+(21,61)	+p	+	+/+	+	+	+	**PA**	**PA**		2	c
2019	**4205**	**Poire**	**Perry**	+p	+p	/	/	+	+(22,35)/+(22,04)	+(22,14)/+(21,80)	+1/2d				+	+	**PA**	**PA**		2	c
2019	**4206**	**Pêche plate**	**Peach**	+p	+p	/	/	+	+(22,26)/+(21,92)	+(22,60)/+(22,11)	+p	+	+/+	+	+	+	**PA**	**PA**		2	c
2019	**4207**	**Ananas découpés**	**Cut pineapple**	+p	+p	/	/	+	-/-	-/-	st				-	-	**ND**	**ND**	**-**	2	c
2019	**4208**	**Melon découpés**	**Cut melon**	+p	+M	/	/	+	+(22,88)/+(22,76)	+(24,03)/+(23,90)	+M	+	+/+	+	+	+	**PA**	**PA**		2	c
2019	**4209**	**Melon découpés**	**Cut melon**	+p	+M	/	/	+	+(24,56)/+(21,38)	+(27,69)/+(27,51)	+M	+	+/+	+	+	+	**PA**	**PA**		2	c
2019	**4513**	**Pur jus de kaki bio**	**Kaki juice**	+p	+p	+p	+p	+	+(20,03)/+(19,75)	+(19,83)/+(20,00)	+p	+	+/+	+	+	+	**PA**	**PA**		2	c
2019	**4514**	**Mangue découpée**	**Cut mango**	st	-	-	-	-	+(40,29)/+(35,27)	+(34,56)/+(33,80)	+Md	+	+/+	+	+	+	**PD**	**PD**		2	c
2019	5813	Mangue découpée	Cut mango	st	-	st	-	-	-/-	-/-	-				-	-	**NA**	**NA**	**-**	2	c
2019	5814	Ananas découpé	Cut pineapple	st	st	st	-	-	-/-	-/-	st				-	-	**NA**	**NA**	**-**	2	c
2019	5815	Melon découpés	Cut melon	st	-	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	**-**	2	c
2019	5816	Pastèque découpée	Cut watermelon	st	st	-	-	-	-/-	-/-	-				-	-	**NA**	**NA**	**-**	2	c
2019	5817	Jus de pomme pressé à froid	Apple juice	st	st	st	st	-	-/-	-/-	st				-	-	**NA**	**NA**	**-**	2	c
2019	5818	Jus de citron pressé à froid	Lemon juice	st	st	st	st	-	-/-	-/-	st				-	-	**NA**	**NA**	**-**	2	c
2019	5819	Jus de pomme frais	Apple juice	st	st	st	st	-	-/-	-/-	st				-	-	**NA**	**NA**	**-**	2	c
2019	5820	Jus d'orange frais	Orange juice	st	st	st	st	-	-/-	-/-	st				-	-	**NA**	**NA**	**-**	2	c

VEGETABLES															
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				Final Result	PCR 7500Fast (target1/target2) Result	PCR QS5 (target1/target2) Result	CT-SMAC	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 20h		Agreement Ref/Alt 72H			
										7500 Fast	QS5	7500 Fast	QS5		
2019	**4185**	**Graines germées radis**	**Sprouts (radish)**	-	+(36,65)/+(35,40)	+(36,42)/+(36,46)	-(1)			-	-	**PPNA**	**PPNA**	2	a
2019	**4188**	**Fines pousses poireaux**	**Sprouts (leeks)**	-	+(35,13)/+(33,37)	+(34,71)/+(34,10)	-(1)			-	-	**PPNA**	**PPNA**	2	a
2019	**4189**	**Fines pousses alfalfa**	**Sprouts (alfalfa)**	-	+(42,63)/+(39,46)	+(38,56)/+(39,47)	-(1)			-	-	**PPNA**	**PPNA**	2	a
2019	**4190**	**Fines pousses alfalfa**	**Sprouts (alfalfa)**	-	+(34,26)/+(35,53)	+(33,50)/+(35,15)	+(1)			+	+	**PD**	**PD**	2	a
2019	**4193**	**Fines pousses alfalfa lentilles poireau**	**Sprouts (alfalfa, lentils, fennel)**	-	+(35,29)/-	+(33,73)/-	-			-	-	**NA**	**NA**	2	a
2019	**4194**	**Fines pousses alfalfa lentilles poireau**	**Sprouts (alfalfa, lentils, fennel)**	+	+(28,11)/-	+(28,40)/-	-			-	-	**ND**	**ND**	2	a
2019	**4505**	**Fines pousses (betteraves rouges)**	**Sprouts (beets)**	-	+(46,65)/+(48,75)	+(41,54)/+(41,19)	-(1)			-	-	**PPNA**	**PPNA**	2	a
2019	**4506**	**Fines pousses (betteraves rouges)**	**Sprouts (beets)**	-	-/-	-/-	-			-	-	**NA**	**NA**	2	a
2019	**4507**	**Fines pousses (radis)**	**Sprouts (radish)**	+	-/-	-/-	-			-	-	**ND**	**ND**	2	a
2019	**4508**	**Fines pousses (radis)**	**Sprouts (radish)**	-	+(35,10)/+(36,09)	+(46,67)/-	-(1)			-	-	**PPNA**	**NA**	2	a
2019	**4509**	**Fines pousses (alfalfa, lentilles, poireaux)**	**Sprouts (alfalfa, lentils, leeks)**	+	-/-	-/-	-			-	-	**ND**	**ND**	2	a
2019	**4512**	**Fines pousses (alfalfa)**	**Sprouts(alfalfa)**	-	+(30,22)/-	+(31,38)/-	-			-	-	**NA**	**NA**	2	a
2019	**5797**	**Fines pousses alfalfa, lentilles poireaux**	**Sprouts (alfalfa, lentils, leeks)**	-	+(35,91)/+(38,02)	+(37,19)/+(37,83)	-(1)			-	-	**PPNA**	**PPNA**	2	a
2019	**5798**	**Fines pousses alfalfa, lentilles poireaux**	**Sprouts (alfalfa, lentils, leeks)**	+	+(33,99)/+(35,84)	+(37,45)/+(37,28)	+(1)	+/+	+	+	+	**PA**	**PA**	2	a
2019	**5799**	**Fines pousses alfalfa**	**Sprouts(alfalfa)**	+	+(38,18)/+(38,26)	+(36,20)/+(37,19)	-(1)			-	-	**PPND**	**PPND**	2	a
2019	**5800**	**Fines pousses alfalfa**	**Sprouts(alfalfa)**	+	+(28,12)/+(33,24)	+(28,92)/+(33,99)	+(1)	+/+	+	+	+	**PA**	**PA**	2	a
2019	**5801**	**Fines pousses alfalfa, lentilles poireaux**	**Sprouts (alfalfa, lentils, leeks)**	-	+(32,50)/+35,63)	+(32,67)/+(35,28)	+(1)	+/+	+	+	+	**PD**	**PD**	2	a
2019	**5802**	**Fines pousses alfalfa**	**Sprouts(alfalfa)**	+	+(32,99)/+(35,26)	+(35,44)/+(35,40)	-(1)			-	-	**PPND**	**PPND**	2	a
2019	**3307**	**Petit pois doux extra-fins surgelés**	**Frozen peas**	-	+(23,54)/+(23,48)	+(24,81)/+(24,72)	+M	+	+	+	+	**PD**	**PD**	2	b
2019	**3308**	**Haricots verts bio surgelés**	**Frozen green beans**	+	-/-	-/-	st			-	-	**ND**	**ND**	2	b
2019	**3309**	**Haricots verts bio surgelés**	**Frozen green beans**	-	+(19,9)/+(19,71)	+(19,98)/+(20,10)	+p	+	+	+	+	**PD**	**PD**	2	b
2019	**3310**	**Choux fleurs en fleurette surgelés**	**Frozen cauliflower**	+	+(22,36)/+(22,28)	+(23,44)/+(23,24)	+p	+	+	+	+	**PA**	**PA**	2	b
2019	**3311**	**Choux fleurs en fleurette surgelés**	**Frozen cauliflower**	+	+(22,02)/+23,33)	+(22,29)/+(22,30)	+p	+	+	+	+	**PA**	**PA**	2	b
2019	**4195**	**Mâche**	**Baby leaves**	-	-/-	-/-	-			-	-	**NA**	**NA**	2	b
2019	**4196**	**Coriandre**	**Leafy greens (coriander)**	+	+(22,30)/+(22,12)	+(22,12)/+(22,34)	+p	+/+	+	+	+	**PA**	**PA**	2	b
2019	**4197**	**Persil plat**	**Leafy greens (parsley)**	-	+(28,38)/+(38,55)	+(28,62)/+(28,93)	+m	+/+	+	+	+	**PD**	**PD**	2	b
2019	**4198**	**Oseille**	**Leafy greens (sorrel)**	-	+(22,31)/+(22,43)	+(22,79)/+(22,80)	+p	+/+	+	+	+	**PD**	**PD**	2	b
2019	**4199**	**Oseille**	**Leafy greens (sorrel)**	-	+(22,91)/+(23,20)	+(23,26)/+(23,25)	+p	+/+	+	+	+	**PD**	**PD**	2	b
2019	**5803**	**Salade sucrine**	**Leafy greens (sucrine salad)**	+	+(29,12)/+(30,10)	+(29,84)+(30,11)	+M	+	+	+	+	**PA**	**PA**	2	b
2019	**5805**	**Cresson**	**Leafy greens (cress)**	+	-/-	-/-	-			-	-	**ND**	**ND**	2	b
2019	**4200**	**Jus d'orange de méditerranée**	**Orange juice**	-	+(20,00)/+(20,00)	+(19,44)/+(19,80)	+p	+/+	+	+	+	**PD**	**PD**	2	c
2019	**4201**	**Jus mangue passion**	**Mango juice**	-	+(20,66)/+(20,55)	+(20,50)/+(20,38)	+p	+/+	+	+	+	**PD**	**PD**	2	c
2019	**4203**	**Jus d'orange bio**	**Orange juice**	+	+(20,12)/+(20,13)	+(20,13)/+(20,20)	+p	+/+	+	+	+	**PA**	**PA**	2	c
2019	**4204**	**Jus de pomme**	**Apple juice**	+	+(20,51)/+(20,55)	+(20,53)/+(20,56)	+p	+/+	+	+	+	**PA**	**PA**	2	c

♦ Analyses performed according to the COFRAC accreditation

VEGETABLES																
Date	N° Sample	Product (French name)	Product	Reference method : ISO 16654 ♦	Alternative method: SureTect *E. coli* O157:H7 (7500 Fast PCR / QS 5 PCR instruments)										Category	Type
					BPW for 20h at 41.5°C + 72 h at 5°C ± 3°C											
				Final Result	PCR 7500Fast (target1/target2) Result	PCR QS5 (target1/target2) Result	CT-SMAC	Confirmation O157 and H7 latex tests (O157 before and after purification, H7 after purification)	Confirmation OXOID *E. coli* O157 latex kit DR0620M (directly on typical colony)	Final result 20h		Agreement Ref/Alt 72H				
										7500 Fast	QS5	7500 Fast	QS5			
2019	**4205**	**Poire**	**Perry**	+	+(20,99)/+(20,66)	+(20,49)/+(20,78)	+md	+/+	+	+	+	**PA**	**PA**	2	c
2019	**4206**	**Pêche plate**	**Peach**	+	+(20,21)/+(20,17)	+(20,21)/+(20,28)	+p	+/+	+	+	+	**PA**	**PA**	2	c
2019	**4207**	**Ananas découpés**	**Cut pineapple**	+	-/-	-/-	st			-	-	**ND**	**ND**	2	c
2019	**4208**	**Melon découpés**	**Cut melon**	+	+(22,29)/+(22,28)	+(23,02)/+(22,82)	+M	+/+	+	+	+	**PA**	**PA**	2	c
2019	**4209**	**Melon découpés**	**Cut melon**	+	+(23,68)/+(23,92)	+(24,33)/+(24,37)	+p	+/+	+	+	+	**PA**	**PA**	2	c
2019	**4513**	**Pur jus de kaki bio**	**Kaki juice**	+	+(20,84)/+(21,29)	+(24,29)/+(24,52)	+p	+/+	+	+	+	**PA**	**PA**	2	c
2019	**4514**	**Mangue découpée**	**Cut mango**	-	+(46,77)/+(38,82)	-/-/+(40,31/+(37,45)/-/+(42,43	-(1)			-	-	**PPNA**	**NA**	2	c

Appendix 5 – Relative detection levels: raw data

Matrix: Beef trim; Strain: *Escherichia coli* O157:H7 Ad933 Aerobic mesophilic flora: 4,8.10³ CFU/g **7500 Fast PCR instrument**

N° sample	Level	Inoculation level (cfu/sample)	Reference method: ISO 16654♦						Alternative method: SureTect *E. coli* O157:H7							
			IMS 6h		IMS 24h		Final Result	Number positive samples/ Total	**8 h** at 41.5°C				**24 h** at 41.5°C			Number positive samples/ Total
			CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157			PCR 7500 Fast PCR Instrument Result (Cq target 1/ Cq target 2)	Confir-mation	Final result	Number positive samples/ Total	PCR 7500 Fast Result	Confirmation	Final result	
6288	0	0	st	st	-	-	-	0/5	-	/	-	0/5	-	-	-	0/5
6289			st	st	-	-	-		-	/	-		-	-	-	
6290			st	st	-	-	-		-	/	-		-	-	-	
6291			st	-	-	-	-		-	/	-		-	-	-	
6292			st	-	st	-	-		-	/	-		-	-	-	
6293	1	1,1	+p	+p	/	/	+	15/20	-	/	-	14/20	-	-	-	15/20
6294			+p	+p	/	/	+		+(32.93/32.95)	+	+		+(26.05/36.62)	+	+	
6295			+p	+m	/	/	+		+(26.42/26.90)	+	+		+(26.37/26.81)	+	+	
6296			+p	+m	/	/	+		-/-(/41.20)/-	+	-		+(30.48/31.39)	+	+	
6297			+p	+p	/	/	+		+(28.40/28.64)	+	+		+(23.74/24.51)	+	+	
6298			+p	+p	/	/	+		+(30.77/31.21)	+	+		+(25.64/26.31)	+	+	
6299			+p	+M	/	/	+		-	/	-		-	-	-	
6300			st	st	+p	+M	+		-	/	-		-	-	-	
6301			st	st	st	-	-		+(27.15/27.40)	+	+		+(24.84/25.28)	+	+	
6302			+p	+M	/	/	+		+(25.00/26.20)	+	+		+(26.13/26.62)	+	+	
6303			+p	+p	/	/	+		-	/	-		-	-	-	
6304			+p	+p	/	/	+		+(25.78/26.05)	+	+		+(24.93/25.45)	+	+	
6305			+p	+p	/	/	+		+(27.16/27.40)	+	+		+(24.75/25.22)	+	+	
6306			st	-	-	-	-		+(30.04/29.84)	+	+		+(23.78/24.70)	+	+	
6307			+p	+p	/	/	+		+(28.02/28.00)	+	+		+(26.78/27.39)	+	+	
6308			st	-	-	-	-		+(27.68/27.82)	+	+		+(25.81/26.38)	+	+	
6309			+p	+p	/	/	+		+(31.83/32.03)	+	+		+(27.90/28.63)	+	+	
6310			st	st	st	-	-		+(27.64/27.86)	+	+		+(23.06/23.92)	+	+	
6311			+p	+p	/	/	+		-	/	-		-	-	-	
6312			st	-	-	-	-		+(31.60/32.30)	+	+		+(23.20/23.94)	+	+	
6313	2	2,8	+p	+p	/	/	+	5/5	+(25.58/25.96)	+	+	5/5	+(24.19/25.05)	+	+	5/5
6314			+p	+p	/	/	+		+(27.31/27.48)	+	+		+(25.86/26.85)	+	+	
6315			+p	+p	/	/	+		+(33.74/33.67)	+	+		+(27.12/27.96)	+	+	
6316			+p	+p	/	/	+		+(26.60/27.01)	+	+		+(23.92/24.67)	+	+	
6317			+p	+p	/	/	+		+(32.10/32.30)	+	+		+(26.44/27.26)	+	+	

♦ Analyses performed according to the COFRAC accreditation

Matrix: Ground beef; Strain: *Escherichia coli* O157:H7 Ad933 Aerobic mesophilic flora: 8,5.10³ CFU/g **QS5 PCR instrument**

N° sample	Level	Inoculation level (cfu/sample)	Reference method: ISO 16654♦						Alternative method: SureTect *E. coli* O157:H7							
			IMS 6h		IMS 24h		Final Result	Number positive samples/ Total	**8 h** at 41.5°C				**24 h** at 41.5°C			Number positive samples/ Total
			CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157			PCR QS5 Result (Cq target 1/Cq target 2)	Confirmation	Final result	Number positive samples/ Total	PCR QS5 Result (Cq target 1/Cq target 2)	Confirmation	Final result	
6049	0	0	st	st	st	+1d(Latex-)	-	0/5	-/-	-	-	0/5	-/-	-	-	0/5
6050			st	st	st	+md(auto)	-		+(26,79/-	-	-		+(20,94)/-	-	-	
6051			st	st	st	+md(auto)	-		-/+(47,07)	-	-		-/-	-	-	
6052			st	st	-	-	-		-/-	-	-		-/-	-	-	
6053			st	st	-	+2d(auto)	-		-/-	-	-		-/-	-	-	
6070	1	0,6	st	st	st	-	-	10/20	+(23,38)/-	-	-	11/20	+(20,37)/-	-	-	11/20
6071			st	st	st	-	-		-/-	-	-		-/-	-	-	
6072			st	st	st	-	-		+(46,14)/-	+	+		+(25,83)/+(25,82)	+	+	
6073			st	st	st	+1d(auto)	-		+(25,75)/+(26,07)	+	+		+(21,67)/+(22,28)	+	+	
6074			+(5)	+M	+p	+1/2	+		-/-	-	-		-/-	-	-	
6075			st	-(2)	st	-	-		+(26,86)/+(27,20)	+	+		+(21,13)/+(22,22)	+	+	
6076			+p	+p	/	/	+		-/-	-	-		-/-	-	-	
6077			st	st	st	-	-		+(27,70)/+(28,16)	+	+		+(23,42)/+(23,67)	+	+	
6078			+p	+p	/	/	+		-/+(45,55)	-	-		-/-	-	-	
6079			st	-	-	-	-		+(25,78)/+(26,28)	+	+		+(21,02)/+22,55)	+	+	
6080			+p	+p	/	/	+		-/-	-	-		-/-	-	-	
6081			+p	+p	/	/	+		-/-	-	-		-/-	-	-	
6082			+p	+p	/	/	+		+(25,69)/+(25,76)	+	+		+(21,83)/+(22,13)	+	+	
6083			+p	+p	/	/	+		+(29,37)/+(29,51)	+	+		+(21,86)/+(21,93)	+	+	
6084			+p	+p	/	/	+		+(24,35)/-	-	-		+(21,01)/-	-	-	
6085			+p	+p	/	/	+		+(26,35)/+(26,47)	+	+		+(25,46)/+(25,77)	+	+	
6086			st	st	-	-	-		+(27,46)/+(27,53)	+	+		+(21,17)/+(21,40)	+	+	
6087			st	st	-	-	-		-/-	-	-		-/-	-	-	
6088			+p	+p	/	/	+		+(23,75)/+(24,91)	+	+		+(20,61)/+(23,52)	+	+	
6089			st	st	-	-	-		+(28,85)/+(28,89)	+	+		+(23,46)/+(23,55)	+	+	
6090	2	1,8	+p	+p	/	/	+	5/5	-/-	-	-	4/5	-/-	-	-	4/5
6091			+p	+p	/	/	+		+(25,96)/+(25,94)	+	+		+(21,07)/+(21,40)	+	+	
6092			+p	+p	/	/	+		+(26,95)/+(27,72)	+	+		+(22,22)/+(23,46)	+	+	
6093			+p	+p	/	/	+		+(25,87)/+(25,86)	+	+		+(21,63)/+(21,89)	+	+	
6094			+p	+p	/	/	+		+(25,59)/+(25,52)	+	+		+(21,69)/+(21,84)	+	+	

♦ Analyses performed according to the COFRAC accreditation

Matrix: Baby leaves; Strain: *Escherichia coli* O157:H7 Ad2986
Seeding: storage 48h at 3±2°C

Total viable count: 6,5.10^{7} CFU/g

QS5 PCR instrument
7500 Fast PCR instrument

N° sample	Level	Inoculation level (cfu/sample)	Reference method: ISO 16654♦						Alternative method: SureTect *E. coli* O157:H7						
			IMS 6h		IMS 24h		Final Result	Number positive samples/ Total	**20 h** at 41.5°C						
			CT-SMAC	CHROMagar O157	CT-SMAC	CHROMagar O157			PCR 7500 Fast Result (Cq target 1/ Cq target 2)	PCR QS5 Result (Cq target 1/Cq target 2)	Confirmation	Final result		Number positive samples/Total	
												7500 Fast	QS5	7500 Fast	QS5
4467	0	0	-	-	st	-	-	0/5	+(22,42)/-	+(23,54)/-	-	-	-	0/5	0/5
4468			-	-	-	-	-		+(24,49)/-	+(27,18)/-	-	-	-		
4469			-	-	st	-	-		+(23,29)/-	+(24,67)/-	-	-	-		
4470			st	-	st	-	-		+(23,06)/-	+(24,59)/-	-	-	-		
4471			st	-	st	-	-		+(21,83)/-	+(22,91)/-	-	-	-		
4472	Low	3,2	-	-	st	-	-	10/20	+(23,50)/+(30,47)	+(24,75)/+(31,86)	+	+	+	12/20	13/20
4473			st	-	st	-	-		+(24,24)/+(30,06)	+(25,68)/+(31,62)	+	+	+		
4474			+p	+M	+p	+M	+		+(25,13)/+(27,45)	+(26,68)/+(28,93)	+	+	+		
4475			+p	+M	+p	+M	+		+(27,08)/+(30,09)/+(27,63)*/+(31,42)*	+(25,28)/+(28,70)	+	+	+		
4476			st	-	st	-	-		+(22,99)/-	+(22,41)/-	-	-	-		
4477			st	-	st	-	-		+(25,03)/-/+(25,04)/+(35,59)	+(24,25)/+(36,48)	+ (1)	-	+		
4478			+p	+M	+p	+1/2	+		+(26,38)/-/+(28,39)*/-*	+(25,79)/-	-	-	-		
4479			+p	+M	+p	+M	+		+(24,18)/+(28,55)	+(24,04)/+(28,45)	+	+	+		
4480			+p	+M	+p	+M	+		+(27,06)/+(28,72)	+(26,60)/+(28,38)	+	+	+		
4481			-	-	st	-	-		+(26,48)/-	+(25,80)/-	-	-	-		
4482			+p	+M	+p	+M	+		+(26,65)/+(30,05)	+(26,43)/+(30,08)	+	+	+		
4483			+p	+m	+M	+M	+		+(25,13)/+(28,68)	+(25,41)/+(28,93)	+	+	+		
4484			+p	+M	+p	+M	+		+(25,41)/-	+(25,44)/-	-	-	-		
4485			st	-	st	-	-		+(25,94)/-/+(27,80)*/-*	+(25,91)/-	-	-	-		
4486			+p	+M	+p	+M	+		+(25,05)/-	+(25,23)/-	-	-	-		
4487			st	-	st	-	-		+(26,85)/-/+(27,55)*/-*	+(26,58)/-	-	-	-		
4488			st	-	st	-	-		+(26,03)/+(30,72)	+(26,08)/+(30,63)	+	+	+		
4489			+p	+M	+p	+M	+		+(26,43)/+(31,22)	+(26,40)/+(31,51)	+ (1	+	+		
4490			st	+d/-	-	-	-		+(27,99)/+(33,77)	+(27,89)/+(33,99)	+	+	+		
4491			-	-	-	-	-		+(24,25)/+(30,59)	+(25,12)/+(31,38)	+	+	+		
4492	High	9,6	+M	+M	+p	+M	+	5/5	+(27,52)/+(28,24)/+(29,81)*/+(30,55)*	+(28,95)/+(29,43)	+(1)	+	+	5/5	5/5
4493			+M	+M	+p	+M	+		+(28,02)/+(28,52)/+(30,61)*/+(31,13)*	+(29,28)/+(29,56)	+	+	+		
4494			+M	+M	+p	+M	+		+(24,82)/+(28,43)	+(26,08)/+(29,50)	+	+	+		
4495			+M	-	+p	+M	+		+(26,55)/+(27,03)/ +(30,27)*/+(30,79)*	+(27,16)/+(27,33)	+	+	+		
4496			+M	+M	+p	+M	+		+(29,99)/+(27,66)	+(30,75)/+(28,50)	+	+	+		

♦ Analyses performed according to the COFRAC accreditation

Appendix 6 – Exclusivity / Inclusivity: raw data (Initial validation - PikoReal PCR Instrument)

POSITIVE STRAINS									
N°	Strain		Reference	Origin	Inoculation level (CFU / 225ml)	SureTect *E. coli* O157:H7 method			
						Pre-warmed BPW incubated for 8 h at 41.5°C			
						PCR result (Ct target 1 / Ct target 2)	CT-SMAC	Confirmation Wellcolex *E. coli* O157:H7 latex kit R30959601 **(O157 before and after purification, H7 after purification)**	Confirmation OXOID *E. coli* O157 latex kit DR0620M **(directly on typical colony)**
1	*Escherichia coli*	O157:H7	Ad 552	Slaughterhouse	8	+ (21.84/23.14)	+	+/+	+
2	*Escherichia coli*	O157:H7	Ad 553	Slaughterhouse	11	+ (22.25/23.00)	+	+/+	+
3	*Escherichia coli*	O157:H7	Ad 554	Slaughterhouse	7	+ (22.31/23.38)	+	+/+	+
4	*Escherichia coli*	O157:H7	Ad 555	Slaughterhouse	11	+ (22.36/22.53)	+	+/+	+
5	*Escherichia coli*	O157:H7	Ad 556	Water purification	13	+ (22.42/22.89)	+	+/+	+
6	*Escherichia coli*	O157:H7	Ad 557	Water purification	10	+ (22.19/22.34)	+	+/+	+
7	*Escherichia coli*	O157:H7	Ad 558	Water purification	6	+ (21.95/23.04)	+	+/+	+
8	*Escherichia coli*	O157:H7	Ad 559	Ground beef	13	+ (27.47/28.86)	+	+/+	+
9	*Escherichia coli*	O157:H7	Ad 560	Ground beef	3	+ (29.16/30.82)	+	+/+	+
10	*Escherichia coli*	O157:H7	Ad 561	Ground beef	11	+ (31.18/32.30)	+	+/+	+
11	*Escherichia coli*	O157:H7	Ad 562	Ground beef	4	+ (32.32/34.21)	+	+/+	+
12	*Escherichia coli*	O157:H7	Ad 563	Ground beef	14	+ (22.13/23.26)	+	+/+	+
13	*Escherichia coli*	O157:H7	Ad 564	Ground beef	12	+ (21.87/24.41)	+	+/+	+
14	*Escherichia coli*	O157:H7	Ad 565	Ground beef	5	+ (22.09/21.73)	+	+/+	+
15	*Escherichia coli*	O157:H7	Ad 566	Ground beef	6	+ (22.15/22.45)	+	+/+	+
16	*Escherichia coli*	O157:H7	Ad 567	Slaughterhouse	5	+ (21.75/23.15)	+	+/+	+
17	*Escherichia coli*	O157:H7	Ad 568	Slaughterhouse	9	+ (22.01/23.30)	+	+/+	+
18	*Escherichia coli*	O157:H7	Ad 569	Slaughterhouse	8	+ (21.76/23.11)	+	+/+	+
19	*Escherichia coli*	O157:H7	Ad 570	Slaughterhouse	7	+ (21.95/22.23)	+	+/+	+

POSITIVE STRAINS									
N°	Strain		Reference	Origin	Inoculation level (CFU / 225ml)	SureTect *E. coli* O157:H7 method			
						Pre-warmed BPW incubated for 8 h at 41.5°C			
						PCR result (Ct target 1 / Ct target 2)	CT-SMAC	Confirmation Wellcolex *E. coli* O157:H7 latex kit R30959601 **(O157 before and after purification, H7 after purification)**	Confirmation OXOID *E. coli* O157 latex kit DR0620M **(directly on typical colony)**
20	*Escherichia coli*	O157:H7	Ad 571	Faeces	9	+ (25.78/27.16)	+	+/+	+
21	*Escherichia coli*	O157:H7	Ad 572	Faeces	7	+ (22.08/23.08)	+	+/+	+
22	*Escherichia coli*	O157:H7	Ad 573	Faeces	18	+ (29.77/31.68)	+	+/+	+
23	*Escherichia coli*	O157:H7	Ad 574	Faeces	13	+ (31.34/33.83)	+	+/+	+
24	*Escherichia coli*	O157:H7	Ad 575	Faeces	5	+ (22.09/22.31)	+	+/+	+
25	*Escherichia coli*	O157:H7	Ad 576	Faeces	5	+ (22.39/22.98)	+	+/+	+
26	*Escherichia coli*	O157:H7	Ad 577	Faeces	10	+ (22.31/22.43)	+	+/+	+
27	*Escherichia coli*	O157:H7	Ad 578	Faeces	9	+ (22.06/22.48)	+	+/+	+
28	*Escherichia coli*	O157:H7	Ad 579	Faeces	14	+ (26.71/28.19)	+	+/+	+
29	*Escherichia coli*	O157:H7	Ad 580	Faeces	29	+ (30.67/32.06)	+	+/+	+
30	*Escherichia coli*	O157:H7	Ad 581	Faeces	2	+ (30.30/31.82)	+	+/+	+
31	*Escherichia coli*	O157:H7	Ad 582	Faeces	6	+ (28.07/29.49)	+	+/+	+
32	*Escherichia coli*	O157:H7	Ad 583	Ground beef	8	+ (26.31/27.63)	+	+/+	+
33	*Escherichia coli*	O157:H7	Ad 584	Ground beef	6	+ (27.05/27.98)	+	+/+	+
34	*Escherichia coli*	O157:H7	Ad 585	Ground beef	7	+ (27.24/28.17)	+	+/+	+
35	*Escherichia coli*	O157:H7	Ad 586	Ground beef	4	+ (25.87/25.34)	+	+/+	+
36	*Escherichia coli*	O157:H7	Ad 587	Ground beef	7	+ (26.37/27.25)	+	+/+	+
37	*Escherichia coli*	O157:H7	Ad 588	Ground beef	5	+ (26.00/27.28)	+	+/+	+
38	*Escherichia coli*	O157:H7	Ad 589	Ground beef	1	+ (32.21/33.73)	+	+/+	+
39	*Escherichia coli*	O157:H7	Ad 590	Ground beef	6	+ (27.53/28.78)	+	+/+	+
40	*Escherichia coli*	O157:H7	Ad 591	Ground beef	5	+ (28.56/30.01)	+	+/+	+

POSITIVE STRAINS									
N°	Strain		Reference	Origin	Inoculation level (CFU / 225ml)	SureTect *E. coli* O157:H7 method			
						Pre-warmed BPW incubated for 8 h at 41.5°C			
						PCR result (Ct target 1 / Ct target 2)	CT-SMAC	Confirmation Wellcolex *E. coli* O157:H7 latex kit R30959601 **(O157 before and after purification, H7 after purification)**	Confirmation OXOID *E. coli* O157 latex kit DR0620M **(directly on typical colony)**
41	*Escherichia coli*	O157:H7	EF190	Faeces	5	+ (20.36/23.12)	+	+/+	+
42	*Escherichia coli*	O157:H7	Ad 922	Ground beef with onions	6	+ (22.06/22.45)	+	+/+	+
43	*Escherichia coli*	O157:H7	CIP103571 (ATCC 35150)	Clinical	3	+ (30.63/32.66)	+	+/+	+
44	*Escherichia coli*	O157:H7	ATCC 43888		1	+ (30.45/31.95)	+	+/+	+
45	*Escherichia coli*	O157:H7	Ad 485	Ground beef	5	+ (22.37/23.33)	+	+/+	+
46	*Escherichia coli*	O157:H7	Ad486	Ground beef	3	+ (22.89/22.85)	+	+/+	+
47	*Escherichia coli*	O157:H7	Ad487	Ground beef	9	+ (21.77/22.29)	+	+/+	+
48	*Escherichia coli*	O157:H7	Ad488	Ground beef	7	+ (22.45/23.06)	+	+/+	+
49	*Escherichia coli*	O157:H7	Ad489	Ground beef	3	+ (21.34/23.07)	+	+/+	+
50	*Escherichia coli*	O157:H7	ATCC 700728	/	7	+ (21.79/22.81)	+	+/+	+

NEGATIVE STRAINS						
N°	Strain		Reference	Origin	Inoculation level (CFU / ml)	SureTect *E. coli* O157:H7 method BPW incubated for 24h at 37°C PCR result (Ct target 1 (H7) / Ct target 2 (O157))
1	*Escherichia coli*	O92:H33	Ad 503	Clinical origin (Mexico)	5.3 10^5	-(-/-)
2	*Escherichia coli*	O3:H2	Ad 504	Clinical origin (Chile	4.2 10^5	-(-/-)
3	*Escherichia coli*	O78:H11	ATCC 35401	/	3.7 10^5	-(-/-)
4	*Escherichia coli*	O6:H6	Ad 506	Human	3.9 10^5	-(-/-)
5	*Escherichia coli*	O6:H10	Ad 507	Clinical origin (Sweden)	5.6 10^5	-(-/-)
6	*Escherichia coli*	O111:H21	Ad 508	Clinical origin (USA)	3.0 10^5	-(-/-)
7	*Escherichia coli*	O86:H43	Ad 509	Animal origin (elephant USA)	4.9 10^5	-(-/-)
8	*Escherichia coli*	O26:H11	Ad 510	Clinical origin (USA)	5.1 10^5	-(-/-)
9	*Escherichia coli*	O111:H8	Ad 511	Clinical origin (USA)	5.3 10^5	-(-/-)
10	*Escherichia coli*	O128:H2	Ad 512	Clinical origin (USA)	5.6 10^5	-(-/-)
11	*Escherichia coli*	O111:H2	Ad 513	Clinical origin (UK)	5.1 10^5	-(-/-)
12	*Escherichia coli*	O128:H7	Ad 514	Clinical origin (USA)	5.6 10^5	-(19.16/-)
13	*Escherichia coli*	O78:K80:H12	ATCC 43896	Human	5.6 10^5	-(-/-)
14	*Escherichia coli*	O104:H21	Ad 516	Clinical origin (USA)	5.3 10^5	-(-/-)
15	*Escherichia coli*	O157:H43	Ad 517	/	5.1 10^5	- (-/21.05)
16	*Escherichia coli*	O55:H7	Ad 518	Clinical origin (Sri Lanka)	5.1 10^5	-(21.17/-)
17	*Escherichia coli*	O44:H18	Ad 519	Clinical origin (Peru)	5.1 10^5	-(-/-)
18	*Escherichia coli*	O127:H6	Ad 520	Clinical origin (UK)	4.7 10^5	-(-/-)
19	*Escherichia coli*	O55:H6	Ad 521	Clinical origin (USA)	5.6 10^5	-(-/-)
20	*Escherichia coli*	O18:K1:H7	Ad 522	Clinical origin	4.6 10^5	-(36.04/-)
21	*Escherichia coli*	O103:H2	Ad1773	Cheese	6.7 10^5	-(-/-)
22	*Escherichia coli*	O45:H2	Ad1778	/	3.8 10^5	-(-/-)

NEGATIVE STRAINS						
N°	Strain		Reference	Origin	Inoculation level (CFU / ml)	SureTect *E. coli* O157:H7 method BPW incubated for 24h at 37°C PCR result (Ct target 1 (H7) / Ct target 2 (O157))
23	*Salmonella*	Landau	Ad499	Food product	2.0 10^5	-(-/-)
24	*Salmonella*	Sternhauze	Ad500	Food product	2.3 10^5	-(-/-)
25	*Hafnia alvei*		88	Bakery	6.2 10^5	-(-/-)
26	*Citrobacter freundii*		25	Frozen raw spinach	4.4 10^5	-(-/-)
27	*Escherichia vulneris*		127	Raw milk	6.4 10^5	-(-/-)
28	*Escherichia coli*	O157	Ad525	Faeces	4.9 10^5	-(-/20.3)
29	*Escherichia coli*	O157	Ad527	Clinical	4.2 10^5	-(-/19.11)
30	*Escherichia coli*	O157:H-	Ad 535	/	5.6 10^5	-(-/20.12)

Appendix 7 – Inter-laboratory study: results obtained by the collaborative laboratories and the expert laboratory (initial validation study- PikoReal PCR Instrument)

Laboratory A

Aerobic mesophilic flora: 2200/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
A6	-	-	/	/	-	24.20/	-	-	/	/	-	**NA**
A9	-	-	/	/	-	/	-	-	/	/	-	**NA**
A10	-	-	/	/	-	37.94/	-	-	/	/	-	**NA**
A15	+	+	+	+	+	25.42/	-	-	/	/	-	**ND**
A18	-	-	/	/	-	41.75/	-	-	/	/	-	**NA**
A21	-	-	/	/	-	/	-	-	/	/	-	**NA**
A23	-	-	/	/	-	31.25/	-	-	/	/	-	**NA**
A24	-	-	/	/	-	28.18/	-	-	/	/	-	**NA**
A2	+	+	+	+	+	23.15/22.61	+	+	+	+	+	**PA**
A5	+	+	+	+	+	25.83/26.40	+	+	+	+	+	**PA**
A8	+	+	+	+	+	24.26/24.43	+	+	+	+	+	**PA**
A12	+	+	+	+	+	24.46/23.98	+	+	+	+	+	**PA**
A16	+	+	+	+	+	23.04/24.24	+	+	+	+	+	**PA**
A19	+	+	+	+	+	24.07/23.01	+	+	+	+	+	**PA**
A20	+	+	+	+	+	24.53/23.45	+	+	+	+	+	**PA**
A22	+	+	+	+	+	28.94/30.19	+	+	+	+	+	**PA**
A1	+	+	+	+	+	21.95/22.47	+	+	+	+	+	**PA**
A3	+	+	+	+	+	22.84/22.51	+	+	+	+	+	**PA**
A4	+	+	+	+	+	23.16/23.08	+	+	+	+	+	**PA**
A7	+	+	+	+	+	22.78/23.05	+	+	+	+	+	**PA**
A11	+	+	+	+	+	22.42/22.54	+	+	+	+	+	**PA**
A13	+	+	+	+	+	23.98/22.62	+	+	+	+	+	**PA**
A14	+	+	+	+	+	21.80/21.70	+	+	+	+	+	**PA**
A17	+	+	+	+	+	22.01/22.18	+	+	+	+	+	**PA**

Laboratory B

Aerobic mesophilic flora: 3600/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
B6	-	-	/	/	-	/	-	-	/	/	-	**NA**
B9	-	-	/	/	-	/	-	-	/	/	-	**NA**
B10	-	-	/	/	-	24.58/	-	-	/	/	-	**NA**
B15	-	+	-/+ **(1)**	-	-	30.32/	-	-	/	/	-	**NA**
B18	-	-	/	/	-	/	-	-	/	/	-	**NA**
B21	-	-	/	/	-	/	-	-	/	/	-	**NA**
B23	-	-	/	/	-	35.63/	-	-	/	/	-	**NA**
B24	-	-	/	/	-	23.18/	-	-	/	/	-	**NA**
B2	+	+	-/+**(1)**	+	-/+**(1)**	26.05/24.58	+	+	+	+	+	**PA**
B5	+	-	-/+ **(1)**	+	-/+**(1)**	38.23/	-	+	+	- (second test:+)	-/+ **(1)**	**ND**
B8	+	+	-/+ **(1)**	+	-/+**(1)**	26.25/26.77	+	+	+	+	+	**PA**
B12	+	+	-/+ **(1)**	+	-/+**(1)**	24.22/24.06	+	+	+	+	+	**PA**
B16	+	+	-/+ **(1)**	+	-/+**(1)**	27.42/21.19	+	+	+	+	+	**PA**
B19	+	+	-/+ **(1)**	+	-/+**(1)**	26.58/27.10	+	+	+	+	+	**PA**
B20	+	+	-/+ **(1)**	+	-/+**(1)**	25.57/26.90	+	+	+	+	+	**PA**
B22	+	+	+	+/- (secont test:+)	-/+**(1)**	25.26/25.30	+	+	+	-(second test:+)	-/+**(1)**	**PA**
B1	+	+	-/+**(1)**	+	+	24.30/23.56	+	+	+	+	+	**PA**
B3	+	-	-/+ **(1)**	+	+	25.57/24.30	+	- IMS step: +	+	+	+	**PA**
B4	+	+	-/+ **(1)**	+	+	21.75/23.06	+	+	+	+	+	**PA**
B7	+	+	-/+ **(1)**	+/- (second test:+)	-/+**(1)**	27.49/23.01	+	+	+	+	+	**PA**
B11	+	+	-/+ **(1)**	+	+	21.82/22.44	+	+	+	+	+	**PA**
B13	+	+	-/+ **(1)**	+	+	22.65/21.90	+	+	+	+	+	**PA**
B14	+	+	-/+ **(1)**	+	+	19.67/21.02	+	+	+	+	+	**PA**
B17	+	+	-/+**(1)**	+	+	21.42/22.13	+	+	+	+	+	**PA**

(1): second test

Laboratory C

Aerobic mesophilic flora: 3700/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
C6	-	-	/	/	-	/	-	-	/	/	-	**NA**
C9	-	-	/	/	-	/	-	-	/	/	-	**NA**
C10	-	-	/	/	-	/	-	-	/	/	-	**NA**
C15	-	-	/	/	-	/	-	-	/	/	-	**NA**
C18	-	-	/	/	-	/	-	-	/	/	-	**NA**
C21	-	-	/	/	-	/	-	-	/	/	-	**NA**
C23	-	-	/	/	-	/	-	-	/	/	-	**NA**
C24	-	-	/	/	-	/	-	-	/	/	-	**NA**
C2	+	+	+	+	+	26.95/27.26	+	+	+	+	+	**PA**
C5	+	+	+	+	+	28.41/29.61	+	+	+	+	+	**PA**
C8	+	+	+	+	+	25.14/26.10	+	+	+	+	+	**PA**
C12	+	+	+	+	+	27.33/27.91	+	+	+	+	+	**PA**
C16	-	-	/	/	-	28.13/31.06	+	+	+	+	+	**PD**
C19	-	-	/	/	-	/	-	+	-	-	-	**NA**
C20	+	+	+	+	+	25.99/25.54	+	+	+	+	+	**PA**
C22	+	+	+	+	+	26.17/26.34	+	+	+	+	+	**PA**
C1	+	+	+	+	+	29.25/27.51	+	+	+	+	+	**PA**
C3	+	+	+	+	+	27.06/27.15	+	+	+	+	+	**PA**
C4	+	+	+	+	+	25.39/25.91	+	+	+	+	+	**PA**
C7	+	+	+	+	+	24.41/25.16	+	+	+	+	+	**PA**
C11	+	+	+	+	+	26.97/28.08	+	+	+	+	+	**PA**
C13	+	+	+	+	+	25.58/26.02	+	+	+	+	+	**PA**
C14	+	+	+	+	+	23.95/25.18	+	+	+	+	+	**PA**
C17	+	+	+	+	+	25.41/25.98	+	+	+	+	+	**PA**

Laboratory D

Aerobic mesophilic flora: 2000/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
D6	-	-	/	/	-	/	-	-	/	/	-	**NA**
D9	-	-	/	/	-	/	-	-	/	/	-	**NA**
D10	-	-	/	/	-	/	-	-	/	/	-	**NA**
D15	-	-	/	/	-	/	-	-	/	/	-	**NA**
D18	-	-	/	/	-	27.1/	-	-	/	/	-	**NA**
D21	-	-	/	/	-	30.7/	-	-	/	/	-	**NA**
D23	-	-	/	/	-	29.31/	-	-	/	/	-	**NA**
D24	-	-	/	/	-	28.37/	-	-	/	/	-	**NA**
D2	-	-	/	/	-	/	-	-	/	/	-	**NA**
D5	+	+	+	+	+	/	-	-	/	/	-	**ND**
D8	-	-	/	/	-	27.42/28.32	+	+	+	+	+	**PD**
D12	+	+	+	+	+	29.23/29.46	+	+	+	+	+	**PA**
D16	+	+	+	+	+	30.95/33.01	+	+	+	+	+	**PA**
D19	+	+	+	+	+	27.44/28.51	+	+	+	+	+	**PA**
D20	+	-	+	+	+	28.15/30.46	+	+	+	+	+	**PA**
D22	+	+	+	+	+	27.57/28.05	+	+	+	+	+	**PA**
D1	+	+	+	+	+	27.68/29.18	+	+	+	+	+	**PA**
D3	+	+	+	+	+	26.73/27.78	+	+	+	+	+	**PA**
D4	+	+	+	+	+	25.74/26.09	+	+	+	+	+	**PA**
D7	+	+	+	+	+	27.29/27.47	+	+	+	+	+	**PA**
D11	+	+	+	+	+	24.59/25.63	+	+	+	+	+	**PA**
D13	+	+	+	+	+	24.61/25.27	+	+	+	+	+	**PA**
D14	+	+	+	+	+	24.51/25.36	+	+	+	+	+	**PA**
D17	+	+	+	+	+	25.51/26.55	+	+	+	+	+	**PA**

Laboratory E

Aerobic mesophilic flora: 5600/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
E6	-	-	/	/	-	29.35/	-	-	/	/	-	**NA**
E9	-	-	/	/	-	32.55/38.57 (1):-	**+/- (1)**	+	-	/	-	**PPNA**
E10	-	-	/	/	-	30.10/	-	-			-	**NA**
E15	-	-	/	/	-	45.29/	-	-			-	**NA**
E18	-	-	/	/	-	41.51/	-	-			-	**NA**
E21	-	-	/	/	-	33.31/	-	-			-	**NA**
E23	-	-	/	/	-	/	-	-			-	**NA**
E24	-	-	/	/	-	/	-	-			-	**NA**
E2	+	+	+	+	+	31.12/33.93	+	+	+	+	+	**PA**
E5	+	+	+	+	+	42.47/	-	-			-	**ND**
E8	+	+	+	+	+	33.53/31.85	+	+	+	+	+	**PA**
E12	+	+	+	+	+	27.97/29.53	+	+	+	+	+	**PA**
E16	+	+	+	+	+	44.22/	-	-			-	**ND**
E19	+	+	+	+	+	45.63/37.79	+	+	+	+	+	**PA**
E20	+	+	+	+	+	31.33/33.61	+	+	+	+	+	**PA**
E22	+	+	+	+	+	28.82/29.47	+	+	+	+	+	**PA**
E1	+	+	+	+	+	27.66/28.13	+	+	+	+	+	**PA**
E3	+	+	+	+	+	27.21/29.29	+	+	+	+	+	**PA**
E4	+	+	+	+	+	28.31/30.15	+	+	+	+	+	**PA**
E7	+	+	+	+	+	28.05/30.05	+	+	+	+	+	**PA**
E11	+	+	+	+	+	28.06/28.77	+	+	+	+	+	**PA**
E13	+	+	+	+	+	25.98/26.96	+	+	+	+	+	**PA**
E14	+	+	+	+	+	27.04/27.31	+	+	+	+	+	**PA**
E17	+	+	+	+	+	26.70/28.44	+	+	+	+	+	**PA**

(1): second test

Laboratory F

Aerobic mesophilic flora:3600/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
F6	-	-	/	/	-	27/55/	-	-	/	/	-	**NA**
F9	-	-	/	/	-	27.62/	-	-	/	/	-	**NA**
F10	-	-	/	/	-	40.38/	-	-	/	/	-	**NA**
F15	-	-	/	/	-	36.58/	-	-	/	/	-	**NA**
F18	-	-	/	/	-	29.32/	-	-	/	/	-	**NA**
F21	-	-	/	/	-	38.13/	-	-	/	/	-	**NA**
F23	-	-	/	/	-	27.18/	-	-	/	/	-	**NA**
F24	-	-	/	/	-	28/	-	-	/	/	-	**NA**
F2	+	+	+	+	+	26.35/26.42	+	+	+	+	+	**PA**
F5	+	+	+	+	+	35.07/	-	-	/	/	-	**ND**
F8	+	+	+	+	+	/	-	-	/	/	-	**ND**
F12	+	+	+	+	+	26.44/27.09	+	+	+	+	+	**PA**
F16	+	+	+	+	+	26.05/26.24	+	+	+	+	+	**PA**
F19	+	+	+	+	+	24.82/25.12	+	+	+	+	+	**PA**
F20	+	+	+	+	+	22.47/23.07	+	+	+	+	+	**PA**
F22	+	+	+	+	+	25.13/26.04	+	+	+	+	+	**PA**
F1	+	+	+	+	+	24.05/24.48	+	+	+	+	+	**PA**
F3	+	+	+	+	+	26.0/25.85	+	+	+	+	+	**PA**
F4	+	+	+	+	+	25.16/25.28	+	+	+	+	+	**PA**
F7	+	+	+	+	+	25.83/26.31	+	+	+	+	+	**PA**
F11	+	+	+	+	+	24.67/24.19	+	+	+	+	+	**PA**
F13	+	+	+	+	+	25.68/24.07	+	+	+	+	+	**PA**
F14	+	+	+	+	+	25.45/25.58	+	+	+	+	+	**PA**
F17	+	+	+	+	+	25.05/25.17	+	+	+	+	+	**PA**

Laboratory G

Aerobic mesophilic flora: 1500/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
G6	-	/	/	/	-	/	-	-	/	/	-	**NA**
G9	-	/	/	/	-	/	-	-	/	/	-	**NA**
G10	-	/	/	/	-	/	-	-	/	/	-	**NA**
G15	-	/	/	/	-	/	-	-	/	/	-	**NA**
G18	-	/	/	/	-	/	-	-	/	/	-	**NA**
G21	-	/	/	/	-	/	-	-	/	/	-	**NA**
G23	-	/	/	/	-	/	-	-	/	/	-	**NA**
G24	-	/	/	/	-	/	-	-	/	/	-	**NA**
G2	+	/	+	+	+	31.68/33.58	+	+	+	+	+	**PA**
G5	+	/	+	+	+	/	-/- **(1)**	+	+	+	-	**ND**
G8	-	/	/	/	-	31.58/32.33	+	+	+	+	+	**PD**
G12	+	/	+	+	+	31.79/32.35	+	+	+	+	+	**PA**
G16	+	/	+	+	+	/ (29.0/31.28)	-/+ **(1)**	+	+	+	-	**ND**
G19	+	/	+	+	+	31.18/32.27	+	+	+	+	+	**PA**
G20	+	/	+	+	+	36.00/33.41	+	+	+	+	+	**PA**
G22	+	/	+	+	+	43.46/35.94	+	+	+	+	+	**PA**
G1	+	/	+	+	+	40.45/35.35	+	+	+	+	+	**PA**
G3	+	/	+	+	+	31.52/32.31	+	+	+	+	+	**PA**
G4	+	/	+	+	+	30.17/33.05	+	+	+	+	+	**PA**
G7	+	/	+	+	+	31.30/32.87	+	+	+	+	+	**PA**
G11	+	/	+	+	+	29.27/31.05	+	+	+	+	+	**PA**
G13	+	/	+	+	+	28.48/29.66	+	+	+	+	+	**PA**
G14	+	/	+	+	+	29.91/31.32	+	+	+	+	+	**PA**
G17	+	/	+	+	+	31.38/31.71	+	+	+	+	+	**PA**

(1): second test

Laboratory H

Aerobic mesophilic flora: 6100/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
H6	-	-	/	/	-	28.89/	-	-	/	/	-	**NA**
H9	-	-	/	/	-	27.39/	-	-	/	/	-	**NA**
H10	-	-	/	/	-	/	-	-	/	/	-	**NA**
H15	-	-	/	/	-	/	-	-	/	/	-	**NA**
H18	-	-	/	/	-	43.49/	-	-	/	/	-	**NA**
H21	-	-	/	/	-	31.99/	-	-	/	/	-	**NA**
H23	-	-	/	/	-	/	-	-	/	/	-	**NA**
H24	-	-	/	/	-	25.96/	-	-	/	/	-	**NA**
H2	+	+	+	+	+	28.66/29.50	+	+	+	+	+	**PA**
H5	+	+	+	+	+	21.92/23.91	+	+	+	+	+	**PA**
H8	+	+	+	+	+	22.94/24.35	+	+	+	+	+	**PA**
H12	+	+	+	+	+	26.16/22.02	+	+	+	+	+	**PA**
H16	+	+	+	+	+	23.30/24.46	+	+	+	+	+	**PA**
H19	+	+	+	+	+	25.03/25.42	+	+	+	+	+	**PA**
H20	+	+	+	+	+	22.47/23.51	+	+	+	+	+	**PA**
H22	+	+	+	+	+	/	-	-	/	/	-	**ND**
H1	+	+	+	+	+	24.07/23.51	+	+	+	+	+	**PA**
H3	+	+	+	+	+	23.72/23.38	+	+	+	+	+	**PA**
H4	+	+	+	+	+	25.89/24.70	+	+	+	+	+	**PA**
H7	+	+	+	+	+	24.84/23.72	+	+	+	+	+	**PA**
H11	+	+	+	+	+	25.25/22.76	+	+	+	+	+	**PA**
H13	+	+	+	+	+	19.86/21.24	+	+	+	+	+	**PA**
H14	+	+	+	+	+	22.98/22.07	+	+	+	+	+	**PA**
H17	+	+	+	+	+	23.59/23.53	+	+	+	+	+	**PA**

Laboratory I

Aerobic mesophilic flora: 6500/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
I6	+	+	+	+	+	/	-	-	/	/	-	**ND**
I9	+	+	+	+	+	31.10/	-	-	/	/	-	**ND**
I10	-	-	/	/	-	39.27/	-	-	/	/	-	**NA**
I15	+	+	+	+	+	47.49/	-	-	/	/	-	**ND**
I18	+	+	+	+	+	/	-	-	/	/	-	**ND**
I21	+	+	+	+	+	/	-	-	/	/	-	**ND**
I23	+	+	+	+	+	43.00/	-	-	/	/	-	**ND**
I24	-	-	/	/	-	/	-	-	/	/	-	**NA**
I2	+	+	+	+	+	30.81/31.82	+	+	+	+	+	**PA**
I5	+	+	+	+	+	30.00/31.15	+	+	+	+	+	**PA**
I8	+	+	+	+	+	41.61/	-	-	/	/	-	**ND**
I12	+	+	+	+	+	31.28/33.22	+	+	+	+	+	**PA**
I16	+	+	+	+	+	30.87/32.09	+	+	+	+	+	**PA**
I19	+	+	+	+	+	29.49/30.37	+	+	+	+	+	**PA**
I20	+	+	+	+	+	28.49/30.11	+	+	+	+	+	**PA**
I22	+	+	+	+	+	30.76/31.90	+	+	+	+	+	**PA**
I1	+	+	+	+	+	27.41/28.23	+	+	+	+	+	**PA**
I3	+	+	+	+	+	30.21/31.09	+	+	+	+	+	**PA**
I4	+	+	+	+	+	28.78/30.09	+	+	+	+	+	**PA**
I7	+	+	+	+	+	27.63/28.38	+	+	+	+	+	**PA**
I11	+	+	+	+	+	30.35/31.94	+	+	+	+	+	**PA**
I13	+	+	+	+	+	27.84/29.23	+	+	+	+	+	**PA**
I14	+	+	+	+	+	30.79/31.68	+	+	+	+	+	**PA**
I17	+	+	+	+	+	28.98/29.56	+	+	+	+	+	**PA**

Laboratory J

Aerobic mesophilic flora: 6500/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
J6	-	-	/	/	-	/	-	-	/	/	-	**NA**
J9	-	-	/	/	-	/	-	-	/	/	-	**NA**
J10	-	-	/	/	-	/	-	-	/	/	-	**NA**
J15	-	-	/	/	-	/	-	-	/	/	-	**NA**
J18	-	-	/	/	-	/	-	-	/	/	-	**NA**
J21	-	-	/	/	-	/	-	-	/	/	-	**NA**
J23	-	-	/	/	-	/	-	-	/	/	-	**NA**
J24	-	-	/	/	-	/	-	-	/	/	-	**NA**
J2	-	-	/	/	-	43.46 /	-	-	/	/	-	**NA**
J5	+	+	+	+	+	/	-	+	+	+	-	**ND**
J8	+	+	+	+	+	31.11 / 35.79	+	+	+	+	+	**PA**
J12	+	+	+	+	+	29.53 / 36.01	+	+	+	+	+	**PA**
J16	-	-	-	-	-	33.25 / 31.76	+	+	+	+	+	**PD**
J19	-	-	-	-	-	30.31 / 31.35	+	+	+	+	+	**PD**
J20	+	+	+	+	+	/	-	-	/	/	-	**ND**
J22	+	+	+	+	+	29.84 / 29.3	+	+	+	+	+	**PA**
J1	+	+	+	+	+	28.87 / 30.37	+	+	+	+	+	**PA**
J3	+	+	+	+	+	31.77 / 32.09	+	+	+	+	+	**PA**
J4	+	+	+	+	+	29.7 / 30.81	+	+	+	+	+	**PA**
J7	+	+	+	+	+	30.93 / 32.24	+	+	+	+	+	**PA**
J11	+	+	+	+	+	30.21 / 31.21	+	+	+	+	+	**PA**
J13	+	+	+	+	+	26.58 / 26.87	+	+	+	+	+	**PA**
J14	+	+	+	+	+	27.52 / 28.19	+	+	+	+	+	**PA**
J17	+	+	+	+	+	28.49 / 29.35	+	+	+	+	+	**PA**

Laboratory K

Aerobic mesophilic flora: 1500/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
K6	-	-	/	/	-	/43.38	-	-	/	/	-	**NA**
K9	+	-	+	-	-	/	-	-	/	/	-	**NA**
K10	-	-	/	/	-	/	-	-	/	/	-	**NA**
K15	-	-	/	/	-	40.20/	-	-	/	/	-	**NA**
K18	-	-	/	/	-	/42.50	-	-	/	/	-	**NA**
K21	-	-	/	/	-	24.03/25.13	+/- **(1)**	-	/	/	-	**PPNA**
K23	-	-	/	/	-	45.40/	-	-	/	/	-	**NA**
K24	-	-	/	/	-	/	-	-	/	/	-	**NA**
K2	-	-	/	/	-	26.75/27.27	+	+	+	+	+	**PD**
K5	+	+	+	+	+	26.03/26.67	+	+	+	+	+	**PA**
K8	+	+	+	+	+	26.30/27.02	+	+	+	+	+	**PA**
K12	+	+	+	+	+	24.58/24.82	+	+	+	+	+	**PA**
K16	+	+	+	+	+	26.22/26.79	+	+	+	+	+	**PA**
K19	+	+	+	+	+	25.28/	-	-	/	/	-	**ND**
K20	+	+	+	+	+	25.91/25.29	+	+	+	+	+	**PA**
K22	-	+	+	-	-	26.56/27.86	+	+	+	+	+	**PD**
K1	+	+	+	+	+	25.68/26.93	+	+	+	+	+	**PA**
K3	+	+	+	+	+	26.05/26.04	+	+	+	+	+	**PA**
K4	+	+	+	+	+	26.66/26.58	+	+	+	+	+	**PA**
K7	+	+	+	+	+	24.40/24.08	+	+	+	+	+	**PA**
K11	+	+	+	+	+	24.97/24.30	+	+	+	+	+	**PA**
K13	+	+	+	+	+	25.04/25.51	+	+	+	+	+	**PA**
K14	+	+	+	+	+	24.03/24.50	+	+	+	+	+	**PA**
K17	+	+	+	+	+	26.88/27.58	+	+	+	+	+	**PA**

(1): second test

Laboratory M

Aerobic mesophilic flora: 1200/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
M6	-	-	/	/	-	30.74/	-	-	/	/	-	**NA**
M9	-	-	/	/	-	/	-	-	/	/	-	**NA**
M10	-	-	/	/	-	41.91/	-	-	/	/	-	**NA**
M15	-	-	/	/	-	/	-	-	/	/	-	**NA**
M18	-	-	/	/	-	/	-	-	/	/	-	**NA**
M21	-	-	/	/	-	/	-	+	-	/	-	**NA**
M23	-	-	/	/	-	/49.84	-	+	-	/	-	**NA**
M24	-	-	/	/	-	30.75/	-	-	/	/	-	**NA**
M2	+	+	+	+	+	24.04/25.27	+	+	+	+	+	**PA**
M5	+	+	+	+	+	21.77/22.37	+	+	+	+	+	**PA**
M8	+	+	+	+	+	23.06/23.77	+	+	+	+	+	**PA**
M12	+	+	+	+	+	/	-	-	/	/	-	**ND**
M16	+	+	+	+	+	21.85/23.08	+	+	+	+	+	**PA**
M19	+	+	+	+	+	26.55/27.34	+	+	+	+	+	**PA**
M20	+	+	+	+	+	21.27/23.12	+	+	+	+	+	**PA**
M22	-	-	/	/	-	22.56/24.04	+	+	+	+	+	**PD**
M1	+	+	+	+	+	22.01/22.17	+	+	+	+	+	**PA**
M3	+	+	+	+	+	21.54/22.34	+	+	+	+	+	**PA**
M4	+	+	+	+	+	21.88/21.66	+	+	+	+	+	**PA**
M7	+	+	+	+	+	21.90/21.49	+	+	+	+	+	**PA**
M11	+	+	+	+	+	20.81/20.55	+	+	+	+	+	**PA**
M13	+	+	+	+	+	22.08/23.35	+	+	+	+	+	**PA**
M14	+	+	+	+	+	23.06/22.26	+	+	+	+	+	**PA**
M17	+	+	+	+	+	21.17/21.28	+	+	+	+	+	**PA**

Laboratory N

Aerobic mesophilic flora: 2800/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
N6	-	-	/	/	-	/	-	-	/	/	-	**NA**
N9	-	-	/	/	-	/	-	-	/	/	-	**NA**
N10	-	-	/	/	-	/	-	-	/	/	-	**NA**
N15	-	-	/	/	-	/	-	-	/	/	-	**NA**
N18	-	-	/	/	-	/	-	-	/	/	-	**NA**
N21	-	-	/	/	-	/	-	-	/	/	-	**NA**
N23	-	-	/	/	-	/	-	-	/	/	-	**NA**
N24	-	-	/	/	-	/	-	-	/	/	-	**NA**
N2	+	+	+	+	+	24.3/25.7	+	+	+	+	+	**PA**
N5	+	+	+	+	+	23.5/24.2	+	+	+	+	+	**PA**
N8	+	+	+	+	+	23.6/23.8	+	+	+	+	+	**PA**
N12	+	+	+	+	+	23.0/24.4	+	+	+	+	+	**PA**
N16	+	+	+	+	+	25.9/26.8	+	+	+	+	+	**PA**
N19	+	+	+	+	+	25.5/26.6	+	+	+	+	+	**PA**
N20	+	+	+	+	+	25.9/28.0	+	+	+	+	+	**PA**
N22	+	+	+	+	+	/	-	-	/	/	-	**ND**
N1	+	+	+	+	+	23.8/24.3	+	+	+	+	+	**PA**
N3	+	+	+	+	+	22.9/23.5	+	+	+	+	+	**PA**
N4	+	+	+	+	+	23.3/23.9	+	+	+	+	+	**PA**
N7	+	+	+	+	+	23.4/23.6	+	+	+	+	+	**PA**
N11	+	+	+	+	+	22.0/22.7	+	+	+	+	+	**PA**
N13	+	+	+	+	+	22.8/23.8	+	+	+	+	+	**PA**
N14	+	+	+	+	+	22.7/22.7	+	+	+	+	+	**PA**
N17	+	+	+	+	+	24.0/25.0	+	+	+	+	+	**PA**

Laboratory O

Aerobic mesophilic flora: 3400/g

N°Sample	Reference method: ISO 16654					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
O6	+	-	+	+	+	/	-	-	/	/	-	**ND**
O9	-	-	/	/	-	/	-	-	/	/	-	**NA**
O10	-	-	/	/	-	/	-	-	/	/	-	**NA**
O15	+	+	+	+	+	/	-	-	/	/	-	**ND**
O18	+	-	+	+	+	/	-	-	/	/	-	**ND**
O21	+	-	-	-	-	/	-	-	/	/	-	**NA**
O23	+	+	+	-	-	/	-	-	/	/	-	**NA**
O24	+	+	+	+	+	/	-	-	/	/	-	**ND**
O2	+	+	+	+	+	27.00/27.66	+	+	+	+	+	**PA**
O5	+	-	+	+	+	27.07/27.68	+	+	+	+	+	**PA**
O8	+	+	+	+	+	42.64/36.07	+	+	+	+	+	**PA**
O12	+	+	+	+	+	30.33/	-	-	/	/	-	**ND**
O16	+	+	+	+	+	/	-	-	/	/	-	**ND**
O19	+	+	+	+	+	/	-	-	/	/	-	**ND**
O20	+	+	+	+	+	31.38/32.73	+	+	+	+	+	**PA**
O22	+	+	+	+	+	25.08/25.73	+	+	+	+	+	**PA**
O1	+	+	+	+	+	27.02/27.46	+	+	+	+	+	**PA**
O3	+	+	+	+	+	25.85/25.91	+	+	+	+	+	**PA**
O4	+	+	+	+	+	24.31/24.75	+	+	+	+	+	**PA**
O7	+	+	+	+	+	24.69/25.00	+	+	+	+	+	**PA**
O11	+	+	+	+	+	24.30/25.41	+	+	+	+	+	**PA**
O13	+	+	+	+	+	25.00/25.78	+	+	+	+	+	**PA**
O14	+	+	+	+	+	26.17/26.41	+	+	+	+	+	**PA**
O17	+	+	+	+	+	25.07/26.06	+	+	+	+	+	**PA**

Laboratory ADRIA

Aerobic mesophilic flora: 3300/g

N°Sample	Reference method: ISO 16654♦					Alternative method: SureTect *E. coli* O157:H7						Agreement
	CT SMAC	CHROMagar O157	Indol	Latex test (O157/H7)	Final result	Ct (target 1 / target 2)	Test result	CT SMAC	Latex test (O157)	Latex test (H7)	Final result	
P6	-	-	/	/	-	/	-	-	/	/	-	**NA**
P9	-	-	/	/	-	/	-	-	/	/	-	**NA**
P10	-	-	/	/	-	/	-	-	/	/	-	**NA**
P15	-	-	/	/	-	/	-	-	/	/	-	**NA**
P18	-	-	/	/	-	/	-	-	/	/	-	**NA**
P21	-	-	/	/	-	/	-	-	/	/	-	**NA**
P23	-	-	/	/	-	/	-	-	/	/	-	**NA**
P24	-	-	/	/	-	/	-	-	/	/	-	**NA**
P2	+	+	+	+	+	25.65/26.26	+	+	+	+	+	**PA**
P5	+	+	+	+	+	31.75/31.58	+	+	+	+	+	**PA**
P8	+	+	+	+	+	29.31/32.03	+	+	+	+	+	**PA**
P12	+	+	+	+	+	27.09/27.38	+	+	+	+	+	**PA**
P16	+	+	+	+	+	27.52/27.81	+	+	+	+	+	**PA**
P19	+	+	+	+	+	27.40/27.33	+	+	+	+	+	**PA**
P20	+	+	+	+	+	27.08/27.50	+	+	+	+	+	**PA**
P22	+	+	+	+	+	24.37/24.37	+	+	+	+	+	**PA**
P1	+	+	+	+	+	25.36/26.17	+	+	+	+	+	**PA**
P3	+	+	+	+	+	25.06/25.32	+	+	+	+	+	**PA**
P4	+	+	+	+	+	26.21/26.06	+	+	+	+	+	**PA**
P7	+	+	+	+	+	24.47/24.68	+	+	+	+	+	**PA**
P11	+	+	+	+	+	24.73/25.99	+	+	+	+	+	**PA**
P13	+	+	+	+	+	23.78/24.25	+	+	+	+	+	**PA**
P14	+	+	+	+	+	23.25/24.03	+	+	+	+	+	**PA**
P17	+	+	+	+	+	24.21/24.74	+	+	+	+	+	**PA**

♦ Analyses performed according to the COFRAC accreditation