

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™ Escherichia coli O157:H7 and STEC Screening PCR Assay and Thermo Scientific™ SureTect™ Escherichia coli STEC Identification PCR Assay

(Certificate number: UNI 03/13-10/20)

for the detection of Shiga-toxin-producing *Escherichia coli* (STEC) O26, O103, O111, O145 and O157:H7 serogroups in raw meats (excluding poultry meat), dairy products and vegetables including fruits

Qualitative method

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This report consists of 117 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♦.

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Quality Assurance documents related to this study can be consulted upon request from **OXOID Ltd.**

The technical protocol and the result interpretation were carried out according to the EN ISO 16140-2:2016 and the AFNOR technical rules (Revision 12).

Validation protocols	<ul style="list-style-type: none"> ▪ EN ISO 16140-1 (June 2016): Microbiology of the food chain - Method validation - <i>Part 1: Vocabulary</i> ▪ EN ISO 16140-2 (June 2016): Microbiology of the food chain - Method validation - <i>Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method</i> ▪ AFNOR Technical Rules (Revision 12)
Reference method	Internal method from ADRIA Développement, based on ISO/TS 13136 (November 2012): Microbiology of food and animal feed - Real-Time Polymerase Chain Reaction (PCR) based method for the detection of food-borne pathogens. Horizontal method for the detection of shiga-toxin producing (STEC) and the determination of O26, O103, O111, O145 and O157 serogroups
Alternative method	Thermo Scientific™ SureTect™ Escherichia coli O157:H7 and STEC Screening PCR Assay and Thermo Scientific™ SureTect™ Escherichia coli STEC Identification PCR Assay
Scope	<input checked="" type="checkbox"/> Raw meats (excluding poultry meat) (25 g and 375 g test portions) <input checked="" type="checkbox"/> Dairy products (25 g test portion) <input checked="" type="checkbox"/> Vegetables including fruits (25 g and 375 g test portions) (excluding sprouted seeds only for 375 g test portion)
Certification organism	AFNOR Certification (http://nf-validation.afnor.org/)

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

1 INTRODUCTION

The Thermo Scientific™ SureTect™ Escherichia coli O157:H7 and STEC Screening PCR Assay and the Thermo Scientific™ SureTect™ Escherichia coli STEC Identification PCR Assay for the detection of shiga-toxin producing *Escherichia coli* (STEC) O26, O103, O111, O145 and O157 serogroups was validated in October 2020 according to the EN ISO 16140:2 (2016) protocol and the AFNOR technical rules (Certificate number: UNI 03/13-10/20). A summary of the different validation studies is listed below:

Date	Study	Validation standard	ISO method
October 2020	Initial validation study: <ul style="list-style-type: none">▪ Raw meat (25 g test portion)▪ Raw dairy products (25 g test portion)▪ Vegetables including fruits (25 g test portion)	EN ISO 16140-2 (June 2016)	ISO/TS 13136 (2012)
December 2020	Extension study: <ul style="list-style-type: none">▪ Raw meat (excluding poultry meat) for 375 g test portion	EN ISO 16140-2 (June 2016)	ISO/TS 13136 (2012)
April 2021	Extension study: <ul style="list-style-type: none">▪ Vegetables including fruits (excluding sprouted seeds) for 375 g test portion	EN ISO 16140-2 (June 2016)	ISO/TS 13136 (2012)
April 2024	Extension study for the CyBio™ FeliX Instrument for SureTect™ PCR Automation Workflow (internal data available from Thermo Fisher Scientific)	/	/
October 2024	Renewal study	EN ISO 16140-2 (June 2016)	ISO/TS 13136 (2012)

2 METHOD PROTOCOLS

2.1 Alternative method

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

2.1.1 Principle

This assay is based on TaqMan™ PCR technology. Dye-labelled probes target unique DNA sequences specific to *Escherichia coli* STEC serotypes and an internal positive control (IPC). Target DNA, if present, is detected by real-time PCR using the **Applied**

Biosystems™ QuantStudio™ 5 Real-Time PCR Instrument and Thermo Scientific™ RapidFinder™ Analysis Software v3 or higher.

The STEC detection is performed using 2 kits:

- **The Thermo Scientific SureTect Escherichia coli O157:H7 and STEC Screening PCR Assay** (Cat. No. A56838) allows simultaneous detection of the 5 following targets in the same PCR tube: stx, eae, O157:H7 (target 1), O157:H7 (target 2) and an IPC.
- **The Thermo Scientific SureTect Escherichia coli STEC Identification PCR Assay** (Cat. No. A56840) allows a simultaneous differentiation of six targets in the same PCR tube. These targets are STEC from O26, O145, O103, O111, O121⁽¹⁾ and O45⁽¹⁾ combined and an IPC.

Lysates are transferred to the Escherichia coli O157:H7 and STEC Screening PCR Tubes or the Escherichia coli STEC Identification PCR Tubes to rehydrate the lyophilized PCR pellets. The pellets contain lyophilized target-specific primers, dye-labelled probes, and PCR master mix components. The PCR tubes are sealed, loaded into the real-time PCR instrument, then the run is started using the RapidFinder Analysis Software. After the run is complete, the software displays the interpreted results as simple positive or negative symbols. The IPC template, primers and probe provide an internal control with each reaction to show that the PCR process has occurred.

The results can be reported, stored, printed, and downloaded as required.

Results are achieved approximately 80 minutes after loading the prepared sample into the instrument.

2.1.2 *Protocols*

Four protocols are available depending on the food matrices and test portions tested; they are described in **Table 1**.

¹ These two serotypes are not in the scope of the ISO/TS 13136: 2012, and therefore cannot be included in the scope of the validation study.

Table 1 - Protocols

PROTOCOL	(1)	(2)	(3)	(4)	
Categories	Raw meat products	Vegetables including fruits	Dairy products	Raw meat products	Vegetables including fruits (excluding sprouted seeds)
Test portion	25 g		25 g	375 g	375 g
Enrichment broth	Pre-warmed (41.5°C) BPW		BPW + 5 mg/L acriflavin	Pre-warmed (41.5°C) BPW	Pre-warmed (41.5°C) BPW
Volume of enrichment broth	225 mL (d 1/10)		225 mL (d 1/10)	1500 mL (d 1/5)	3375 mL (d 1/10)
Enrichment condition	8 - 24 h at 41.5 ± 1°C		16 - 24 h at 41.5 ± 1°C	8 - 24 h at 41.5 ± 1°C	10 - 24 h at 41.5 ± 1°C
Dilution after enrichment step	/		1-in-2 dilution (for example: 1 mL enriched sample + 1 mL BPW)	/	/
DNA extraction	10 µL enrichment broth		10 µL diluted enrichment broth	10 µL enrichment broth	10 µL enrichment broth
PCR	stx - eae - O157:H7	SureTect Escherichia coli O157:H7 and STEC Screening PCR Assay on 20 µL lysate			
	O26 - O45 ⁽¹⁾ - O103 O111 - O121 ⁽¹⁾ - O145	SureTect Escherichia coli STEC Identification PCR Assay on 20 µL lysate			
Confirmation ⁽²⁾	Direct streaking (10 µL)	O157: CT-SMAC non O157: Chromogenic Coliform Agar (CCA), CHROMAgar™ STEC			
	Immuno-concentration	On 1 ml enriched sample using Dynabeads Streaking 10 µL of immunobeads suspension on: • O157: CT-SMAC • non O157: Chromogenic Coliform Agar (CCA), CHROMAgar STEC			
	Alternative protocol	If positive PCR but no suspect colonies present on plates (due to an overgrowth of typical colonies by background microflora), dilution series (-1, -2, -3) from the IMS beads can be performed.			
	Colonies testing: single isolated typical colony, or up to 10 colonies from one or two plates (pooling up to 10 colonies is possible for PCR tests)	<u>Option 1: Colonies confirmation based on PCR:</u> <ul style="list-style-type: none"> ○ SureTect Escherichia coli O157:H7 and STEC Screening PCR Assay AND <ul style="list-style-type: none"> ○ SureTect Escherichia coli STEC Identification PCR Assay <u>Option 2: Colonies confirmation combining PCR screening and Latex tests:</u> <ul style="list-style-type: none"> ○ SureTect Escherichia coli O157:H7 and STEC Screening PCR Assay AND <ul style="list-style-type: none"> ○ OXOID Escherichia coli O157 Latex test OR <ul style="list-style-type: none"> ○ Remel™ RIM E. coli O157:H7 Latex test (H7 after purification step onto blood agar) OR <ul style="list-style-type: none"> ○ Prolex kits for non O157 serogroups 			

⁽¹⁾ These two serotypes are not in the scope of the ISO/TS 13136: 2012, and therefore cannot be included in the scope of the validation study.

⁽²⁾ These confirmation protocols were tested during the ISO 16140:2016 validation study. In addition, note that according to the AFNOR technical rules, it is possible to use the confirmation tests described in the ISO/TS:2012 13136 standard.

It is possible to store the enrichment broth for 72 h at 5°C ± 3°C before proceeding to extraction, PCR and confirmatory tests.

2.1.3 *Restrictions*

Poultry meat (25 g and 375 g test portions) and sprouted seeds (for 375 g test portion only) are excluded from the scope.

2.2 Reference method*

The **reference method is the internal method from ADRIA based on ISO/TS 13136 (November 2012)**: Microbiology of food and animal feed - Real-Time Polymerase Chain Reaction (PCR) based method for the detection of food-borne pathogens. Horizontal method for the detection of shiga-toxin-producing (STEC) and the determination of O157, O111, O26, O103 and O145 serogroups (See **Appendix 2**).

Tests have been done in the expert lab to ensure that the sample size of 375 g tests portions can be used for both ISO and alternative methods and covered by the ISO 17025 accreditation. The same sample size (375 g) was tested for both reference and alternative methods for the sensitivity study. For the RLOD determination, 25 g test portions were tested for the reference method while 375 g test portions were used for the alternative method. Although the ISO method allows flexibility regarding the maximum sample size, demonstrating performance against the reference method with 25 g provides improved confidence in performance of the alternative method. This was proposed for the RLOD as done when comparing 25 g and 375 g test portions for the reference method for accreditation purposes.

2.3 Study design

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

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

3 INITIAL VALIDATION STUDY AND EXTENSION STUDIES: RESULTS

3.1 Method comparison study

The method comparison study is a study performed by the expert laboratory to compare the alternative method with the reference method.

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.

3.1.1.1 Number and nature of samples

Combining all the categories and test portions, 333 samples were tested providing 163 positive and 170 negative results.

As two incubation times were tested for the raw meat (8 h and 24 h for 25 g and 375 g), and vegetables categories (8 h and 24 h for 25 g; 10 h and 24 h for 375 g) the repartition of positive and negative samples per category and type for each incubation time is provided in **Table 2**.

Table 2 – Distribution per tested category and type

Category	Test portion	Protocol	Incubation time	Type	Positive	Negative	Total			
1 Raw meat products (excluding poultry)	25 g	Pre-warmed BPW at 41.5°C	8 h	a Raw (beef, veal, pork, lamb, etc.)	10	11	21			
				b Seasoned and marinated (beef, veal, pork, lamb, etc.)	10	11	21			
				c Frozen (beef, veal, pork, lamb, etc.)	11	10	21			
			24 h	Total	31	32	63			
				a Raw (beef, veal, pork, lamb, etc.)	10	11	21			
	375 g	Pre-warmed BPW at 41.5°C	8 h	b Seasoned and marinated (beef, veal, pork, lamb, etc.)	10	11	21			
				c Frozen (beef, veal, pork, lamb, etc.)	11	10	21			
				Total	31	32	63			
			24 h	a Raw (beef, veal, pork, lamb, etc.)	10	12	22			
				b Seasoned and marinated (beef, veal, pork, lamb, etc.)	12	10	22			
2 Dairy products	25 g	BPW+ 5mg/L acriflavin 16 h at 41.5°C	8 h	c Frozen (beef, veal, pork, lamb, etc.)	10	10	20			
				Total	32	32	64			
				a Raw (beef, veal, pork, lamb, etc.)	9	13	22			
			24 h	b Seasoned and marinated (beef, veal, pork, lamb, etc.)	12	10	22			
				c Frozen (beef, veal, pork, lamb, etc.)	10	10	20			
3 Vegetables including fruits	25 g	Pre-warmed BPW at 41.5°C	16 h	Total	31	42	73			
				a Raw milk	12	8	20			
				b Raw milk cheeses	9	24	33			
				c Pasteurised milk and cheeses	10	10	20			
			8 h	Total	31	42	73			
				a Sprouted seeds and leafy greens	10	13	23			
				b Vegetables (unprocessed, frozen and cut)	12	10	22			
	375 g (excluding sprouted seeds)	Pre-warmed BPW at 41.5°C	24 h	c Fruits and juices (fresh and frozen, unprocessed or cut)	11	9	20			
				Total	33	32	65			
				a Sprouted seeds and leafy greens	11	12	23			
			8 h	b Vegetables (unprocessed, frozen and cut)	12	10	22			
				c Fruits and juices (fresh and frozen, unprocessed or cut)	11	9	20			
			10 h	Total	34	31	65			
				a Leafy greens	12	8	20			
				b Vegetables (unprocessed, frozen and cut)	12	14	26			
				c Fruits and juices (fresh and frozen, unprocessed or cut)	12	10	22			
			24 h	Total	36	32	68			
				a Leafy greens	12	8	20			
				b Vegetables (unprocessed, frozen and cut)	12	14	26			
				c Fruits and juices (fresh and frozen, unprocessed or cut)	12	10	22			
				Total	36	32	68			
All categories and test portions		Short protocol: 8 h or 10 h respectively for meat, vegetables, and 16 h for dairy				163	170	333		
		16 h for dairy and 24 h for meat and vegetables				163	170	333		

As required in the AFNOR technical rules, the meat products were mainly contaminated with strains belonging to O145 serogroup (7 to 10 samples depending on the test portion and incubation time) and O157 serogroup (8 to 9 samples), the dairy products with O26 serogroup (8 samples) and O103 serogroup (9 samples), the vegetables products with O111 serogroup (8 to 14 samples depending on the test portion and the incubation time) (see **Table 3**).

Table 3 – Distribution of positive samples per serogroup detected per category

Category				O26	O103	O111	O145	O157	Total	
1	Raw meat products (excluding poultry)	25 g	8 h	3	4	5	10	9	31	
			24 h	3	4	5	10	9	31	
		375 g	8 h	5	6	5	8	8	32	
			24 h	5	6	5	7	8	31	
2	Dairy products	25 g	16 h	8	9	4	4	6	31	
3	Vegetables including fruits	25 g	8 h	4	4	13	7	5	33	
			24 h	4	4	14	7	5	34	
		375 g (excluding sprouted seeds)	10 h	8	6	8	7	6	35	
			24 h	8	6	9	7	6	36	
All categories and test portions		Short protocol: 8 h or 10 h respectively for meat, vegetables, and 16 h for dairy			28	29	35	36	162	
		16 h for dairy and 24 h for meat and vegetables			28	29	37	35	163	

3.1.1.2 Artificial contamination of samples

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

There were 210 artificially contaminated samples, using 60 different strains. There were 161 positive results.

The repartition of the positive samples per inoculation level is given in **Table 4**.

Table 4 - Repartition of the positive samples per inoculation level

Category	Test portion	Naturally contaminated	Seeding protocol			Total
			≤ 3 CFU	3 < x ≤ 5 CFU	5 < x ≤ 10 CFU	
1 Raw meat products (excluding poultry)	25 g	0	25	6	0	31
	375 g	0	21	11	0	32
2 Dairy products	25 g	2	23	4	2	31
3 Vegetables including fruits	25 g	0	27	6	1	34
	375 g (excluding sprouted seeds)	0	27	9	0	36
All categories and test portions		2	123	36	3	164
%		1.2%	75.0%	22.0%	1.8%	100.0%

The portion of samples contaminated by seeding at an inoculation level below or equal to 3 CFU per test portion was 75.0%. While 23.8% of the samples giving a positive result were contaminated at higher level, between 3 and 10 CFU but note that 22.0% were contaminated between 3 and 5 CFU. For the vegetables category (375 g), 29.4% of the samples contaminated below or equal to 3 CFU gave negative results, the target inoculation level was therefore raised slightly.

Only two samples (samples 8072 and 8152, both raw cow milk cheeses) were naturally contaminated: one by a strain belonging to the O103 serogroup and the other to the O26 serogroup, representing 1.2 % of naturally contaminated samples.

3.1.1.3 Protocols applied during the validation study

➤ Incubation time

The following incubation times were applied:

Category	Test portion	Incubation time
Raw meats products		
Vegetables including fruits	25 g	8 h and 24 h
Dairy products	25 g	16 h
Raw meats products	375 g	8 h and 24 h
Vegetables including fruits (excluding sprouted seeds)	375 g	10 h and 24 h

> Lysis and PCR

The lysis step was performed using the Applied Biosystems™ SimpliAmp™ Thermal Cycler and the PCR using the Biosystems™ QuantStudio™ 5 Real-Time PCR Instrument.

> Confirmation protocols

- For all samples: direct streaking onto CCA, CHROMagar STEC, CT-SMAC
- For positive samples:
 - Direct streaking onto CCA, CHROMagar STEC, CT-SMAC (for O157 confirmation)
 - IMS prior streaking onto CCA, CHROMagar STEC, CT-SMAC (for O157 confirmation)
 - If required, alternative protocol was applied (immunobeads dilutions (Dynabeads™): -1, -2, -3 before plating onto selective agar plates)
- Confirmation of typical colonies (without purification step from CT-SMAC and CHROMagar on first choice, test up to 10 colonies from one or two plates, pooling up to 10 colonies is possible for PCR tests):
 - **Option 1: Colonies confirmation based on PCR:**
 - SureTect Escherichia coli O157:H7 and STEC Screening PCR Assay
AND
○ SureTect Escherichia coli STEC Identification PCR Assay
 - **Option 2: Colonies confirmation combining PCR screening and Latex tests:**
 - SureTect Escherichia coli O157:H7 and STEC Screening PCR Assay
AND
○ OXOID Escherichia coli O157 Latex test
OR
○ Remel RIM E. coli O157:H7 Latex test (H7 after purification step onto blood agar)
OR
○ Prolex kits for non O157 serogroups

> **Enrichment broth storage**

The enrichment broths of the alternative method from positive and discordant samples were stored for 72h at $5 \pm 3^\circ\text{C}$ and tested again (extraction, PCR, and confirmatory tests).

3.1.1.4 Test results

Raw data per category are given in **Appendix 4**. The results are given in **Table 5**.

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

Category		Test portion	Protocol	Incubation time	PA	NA*	PD	ND**	PPND	PPNA	TOTAL		
1	Raw meat products (excluding poultry)	25 g	Pre-warmed BPW at 41.5°C (1-in-10)	8 h	11	32	15	5	0	0	63		
				24 h	11	32	15	5	0	0	63		
		375 g	Pre-warmed BPW at 41.5°C (1-in-5)	8 h	16	31	11	5	0	1	64		
				24 h	17	31	10	4	0	2	64		
2	Dairy products	25 g	BPW + 5 mg/L acriflavin at 41.5°C (1-in-10)	16 h	11	42	14	6	0	0	73		
3	Vegetables including fruits	25 g	Pre-warmed BPW at 41.5°C (1-in-10)	8 h	15	30	11	7	0	2	65		
				24 h	15	28	12	7	0	3	65		
		375 g (excluding sprouted seeds)	Pre-warmed BPW at 41.5°C (1-in-10)	10 h	20	30	8	8	0	2	68		
				24 h	22	30	8	6	0	2	68		
All categories and test portions		Short protocol: 8 h or 10 h respectively for meat, vegetables, and 16 h for dairy			73	165	59	31	0	5	333		
		16 h for dairy and 24 h for meat and vegetables			76	163	59	28	0	7	333		

* PPNA not included

** PPND not included

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

The calculations are presented in **Table 6**.

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

Category		Test portion	Protocol	Incubation time	Type		PA	NA*	PD	ND**	PPND	PPNA	SE _{alt} %	SE _{ref} %	RT %	FPR %
1	Raw meat products (excluding poultry)	25 g	Pre-warmed BPW at 41.5°C (1-in-10)	8 h	a	Raw (beef, veal, pork, lamb, etc.)	2	11	8	0	0	0	100.0	20.0	61.9	0.0
					b	Seasoned and marinated (beef, veal, pork, lamb, etc.)	3	11	5	2	0	0	80.0	50.0	66.7	0.0
					c	Frozen (beef, veal, pork, lamb, etc.)	6	10	2	3	0	0	72.7	81.8	76.2	0.0
				Total			11	32	15	5	0	0	83.9	51.6	68.3	0.0
				24 h	a	Raw (beef, veal, pork, lamb, etc.)	2	11	8	0	0	0	100.0	20.0	61.9	0.0
					b	Seasoned and marinated (beef, veal, pork, lamb, etc.)	3	11	5	2	0	0	80.0	50.0	66.7	0.0
					c	Frozen (beef, veal, pork, lamb, etc.)	6	10	2	3	0	0	72.7	81.8	76.2	0.0
		375 g	Pre-warmed BPW at 41.5°C (1-in-5)	8 h	a	Raw (beef, veal, pork, lamb, etc.)	1	12	8	1	0	0	90.0	20.0	59.1	0.0
					b	Seasoned and marinated (beef, veal, pork, lamb, etc.)	6	9	2	4	0	1	66.7	83.3	72.7	10.0
					c	Frozen (beef, veal, pork, lamb, etc.)	9	10	1	0	0	0	10.0	90.0	95.0	0.0
				Total			16	31	11	5	0	1	84.4	65.6	75.0	3.1
				24 h	a	Raw (beef, veal, pork, lamb, etc.)	2	12	7	0	0	1	100.0	22.2	68.2	7.7
					b	Seasoned and marinated (beef, veal, pork, lamb, etc.)	6	9	2	4	0	1	66.7	83.3	72.7	10.0
					c	Frozen (beef, veal, pork, lamb, etc.)	9	10	1	0	0	0	100.0	90.0	95.0	0.0
				Total			17	31	10	4	0	2	87.1	67.7	78.1	6.1
2	Dairy products	25 g	BPW+5mg/L acriflavin at 41.5°C (1-in-10)	16 h	a	Raw milk	6	8	4	2	0	0	83.3	66.7	70.0	0.0
					b	Raw milk cheeses	1	24	7	1	0	0	88.9	22.2	75.8	0.0
					c	Pasteurised milk and cheeses	4	10	3	3	0	0	70.0	70.0	70.0	0.0
					Total			11	42	14	6	0	0	80.6	54.8	72.6

Category	Test portion	Protocol	Incubation time	Type	PA	NA*	PD	ND**	PPND	PPNA	SE _{alt} %	SE _{ref} %	RT %	FPR %			
3 Vegetables including fruits	25 g	Pre-warmed BPW at 41.5°C (1-in-10)	8 h	a Sprouted seeds and leafy greens	3	11	3	4	0	2	60.0	70.0	69.6	15.4			
				b Vegetables (unprocessed, frozen and cut)	6	10	5	1	0	0	91.7	58.3	72.7	0.0			
				c Fruits and juices (fresh and frozen, unprocessed or cut)	6	9	3	2	0	0	81.8	72.7	75.0	0.0			
				Total	15	30	11	7	0	2	78.8	66.7	72.3	6.3			
			24 h	a Sprouted seeds and leafy greens	3	9	4	4	0	3	63.6	63.6	65.2	25.0			
				b Vegetables (unprocessed, frozen and cut)	6	10	5	1	0	0	91.7	58.3	72.7	0.0			
				c Fruits and juices (fresh and frozen, unprocessed or cut)	6	9	3	2	0	0	81.8	72.7	75.0	0.0			
				Total	15	28	12	7	0	3	79.4	64.7	70.8	9.7			
	375 g (excluding sprouted seeds)	Pre-warmed BPW at 41.5°C (1-in-10)	10 h	a Leafy greens	7	6	4	1	0	2	91.7	66.7	75.0	25.0			
				b Vegetables (unprocessed, frozen and cut)	6	14	2	4	0	0	66.7	83.3	76.9	0.0			
				c Fruits and juices (fresh and frozen, unprocessed or cut)	7	10	2	3	0	0	75.0	83.3	77.3	0.0			
				Total	20	30	8	8	0	2	77.8	77.8	76.5	6.3			
			24 h	a Leafy greens	7	6	4	1	0	2	91.7	66.7	75.0	25.0			
				b Vegetables (unprocessed, frozen and cut)	7	14	2	3	0	0	75.0	83.3	80.8	0.0			
				c Fruits and juices (fresh and frozen, unprocessed or cut)	8	10	2	2	0	0	83.3	83.3	81.8	0.0			
				Total	22	30	8	6	0	2	83.3	77.8	79.4	6.3			
All categories and test portions		Short protocol: 8 h or 10 h respectively for meat, vegetables, and 16 h for dairy				73	165	59	31	0	5	81.0	63.8	73.0	2.9		
		16 h for dairy and 24 h for meat and vegetables				76	163	59	28	0	7	82.8	63.8	73.9	4.1		

* PPNA not included

** PPND not included

A summary of the results is given in **Table 7**.

Table 7 - Summary of results

		All categories and test portions	
	Short protocol: 8 h or 10 h respectively for meat, vegetables, and 16 h for dairy)	16 h for dairy and 24 h for meat and vegetables	
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA + PD)}{(PA + ND + PD)} \times 100\%$	81.0 %	82.8 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA + ND)}{(PA + ND + PD)} \times 100\%$	63.8 %	63.8 %
Relative trueness	$RT = \frac{(PA + NA)}{N} \times 100\%$	73.0 %	73.9 %
False positive ratio for the alternative method* FP = PPNA + PPND	$FPR = \frac{(FP)}{NA} \times 100\%$	2.9 %	4.1 %

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

3.1.1.6 Analysis of discordant results

The negative deviations are given in **Table 8** and the positive deviations in **Table 9**.

> Negative deviations

Combining all the categories, 31 or 28 negative deviations were observed depending on the incubation times (8 h-10 h or 24 h) for this unpaired study.

The presence of STEC was confirmed for four samples: N°3962 (raw lamb meat, 375 g, contaminated with *E. coli* O145), N°27 (grated carrots under MAP contaminated with *E. coli* O111) N°38 (frozen figs contaminated with *E. coli* O103), and N°8148 (pasteurised cow milk contaminated with *E. coli* O111). The PCR were repeated for these samples. For sample N°38, positive PCR results were obtained twice. The detection limit of the SureTect Escherichia coli O157:H7 and STEC method was likely not reached for these samples.

The negative deviations concern samples contaminated with strains belonging to the five targeted serogroups: O26 serogroup (6 samples), O103 (6 samples), O111 (10 samples), O145 (3 samples) and O157 (6 samples).

> **Positive deviations**

For all combined categories, all incubation times, and all test portions: 59 positive deviations were observed.

The positive deviations concern samples contaminated with strains belonging to the five targeted serogroups: O26 serogroup (9 samples), O103 (9 samples), O111 (12 samples), O145 (18 samples) and O157 (11 samples).

Table 8 - Negative deviations

Sample N°	Product	Test portion	Artificial contamination		ISO/TS 13136* Result		Alternative method: SureTect STEC (Raw meat products and Vegetables including fruits)								Category	Type	
							8 h or 10 h incubation time				24 h incubation time						
							Final result PCR 8h	Final result all confirmatory tests	Final result SureTect STEC 8h		Agreement 8h	Final result PCR 24h	Final result all confirmatory tests	Final result SureTect STEC 24h		Agreement 24h	
			Strain	Inoculation Level CFU/sample	Global result	Serogroup			Global result	Sero-group				Global result	Sero-group		
7791	Seasoned pork meat	25g	<i>E. coli</i> O26:H11 12-62	2.6	+	O26	-	-	-	/	ND	-	-	-	/	ND	1 b
7792	Seasoned veal meat		<i>E. coli</i> O145 092-4	4.0	+	O145	-	-	-	/	ND	-	-	-	/	ND	1 b
3279	Frozen ground beef		<i>E. coli</i> O157:H7 Ad485	1.6	+	O157	-	-	-	/	ND	-	-	-	/	ND	1 c
3283	Frozen beef trim		<i>E. coli</i> O26:H11 12-62	1.4	+	O26	-	-	-	/	ND	-	-	-	/	ND	1 c
7709	Frozen marinated pork meat		<i>E. coli</i> O103 Ad1772	4.2	+	O103	-	-	-	/	ND	-	-	-	/	ND	1 c
3962	Raw lamb trim	375g	<i>E. coli</i> O145:H28 2305-1	4.2	+	O145	-/-	0145	-	/	ND	O145	O145	+	O145	PA	1 a
3964	Seasoned beef meat		<i>E. coli</i> O157:H7 Ad222	5.0	+	O157	-	-	-	/	ND	-	-	-	/	ND	1 b
3966	Raw ground veal		<i>E. coli</i> O111:H8 Ad3021	1.0	+	O111	-/-	-	-	/	ND	-	-	-	/	ND	1 b
4346	Seasoned lamb meat		<i>E. coli</i> O103:H2 262-03-18-1	2.2	+	O103	-	-	-	/	ND	-	-	-	/	ND	1 b
4347	Marinated lamb meat		<i>E. coli</i> O26:H11 1377-135 lot 3	2.4	+	O26	-	-	-	/	ND	-	-	-	/	ND	1 b
4692	Endives	25g	<i>E. coli</i> O157:H7 Ad558	2.6	+	O157	-	-	-	/	ND	-	-	-	/	ND	3 a
4700	Oak leaf salad		<i>E. coli</i> O111:H8 Ad511	2.4	+	O111	-	-	-	/	ND	-	-	-	/	ND	3 a
352	Mix baby leaves		<i>E. coli</i> O111:H8 Ad3021	2.2	+	O111	-	-	-	/	ND	-	-	-	/	ND	3 a
353	Spinach baby leaves		<i>E. coli</i> O111 Ad981	3.0	+	O111	-	-	-	/	ND	-	-	-	/	ND	3 a
351	Grated carrots MAP		<i>E. coli</i> O111:H8 Ad3021	2.2	+	O111	-	-	-	/	ND	-	-	-	/	ND	3 b
7708	Frozen cantaloup	375g	<i>E. coli</i> O157 Ad3118	3.0	+	O157	-	-	-	/	ND	-	-	-	/	ND	3 c
263	Pomegranate cut		<i>E. coli</i> O145 Ad983	1.8	+	O145	-	-	-	/	ND	-	-	-	/	ND	3 c
4106	Cabbage		<i>E. coli</i> O26 Ad1777	3.0	+	O26	-	-	-	/	ND	-	-	-	/	ND	3 a
2	Mix vegetables MAP		<i>E. coli</i> O26:H11 Ad1507	1.4	+	O26	-	-	-	/	ND	-	-	-	/	ND	3 b
6	Mix vegetables MAP		<i>E. coli</i> O157:H7 Ad571	0.8	+	O157	-	-	-	/	ND	-	-	-	/	ND	3 b
27	Grated carrots MAP	375g	<i>E. coli</i> O111:H8 Ad511	1.2	+	O111	-/-	0111	-	/	ND	O111	O111	+	O111	PA	3 b
39	Frozen zucchini		<i>E. coli</i> O103 Ad982	3.4	+	O103	-	-	-	/	ND	-	-	-	/	ND	3 b
33	Frozen apricots		<i>E. coli</i> O111 Ad981	2.0	+	O111	-	-	-	/	ND	-	-	-	/	ND	3 c
38	Frozen figs		<i>E. coli</i> O103 Ad982	3.4	+	O103	-/O103/ O103	0103	-	/	ND	O103	O103 (72h)	+	O103	PA	3 c
258	Fresh juice (apple and red fruits)		<i>E. coli</i> O111 Ad3037	2.0	+	O111	-	-	-	/	ND	-	-	-	/	ND	3 c

Sample N°	Product	Artificial contamination		ISO/TS 13136* Result		Alternative method: SureTect STEC (Dairy products)						Category	Type	
						16 h incubation time				Final Result SureTect STEC				
		Strain	Inoculation Level CFU/sample	Global result	Serogroup	Final Result PCR	Final result all confirmatory tests	Global result	Serogroup	Agreement	Global result	Serogroup		
8042	Cow raw milk	<i>E. coli</i> O111 Ad3041	1.4	+	O111	-	-	-	/	ND	2	a		
8388	Ewe raw milk	<i>E. coli</i> O103 Ad2839	3.8	+	O103	-	-	-	/	ND	2	a		
183	Cow raw milk cheese	<i>E. coli</i> O157:H7 Ad3101	9.2	+	O157	-	-	-	/	ND	2	b		
7935	Pasteurized cow milk cheese	<i>E. coli</i> O26 Ad3056	2.6	+	O26	-	-	-	/	ND	2	c		
8046	Pasteurized goat milk cheese	<i>E. coli</i> O103:H2 Ad3100	1.2	+	O103	-	-	-	/	ND	2	c		
8148	Pasteurized cow milk	<i>E. coli</i> O111 Ad3053	1.2	+	O111	-/-	0111	-	/	ND	2	c		

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

Table 9 - Positive deviations

Sample N°	Product	Test portion	Artificial contamination		ISO/TS 13136* Result		Alternative method: SureTect STEC (Raw meat products and Vegetables including fruits)								Category	Type	
							8 h or 10 h incubation time				24 h incubation time						
							Final result PCR 8h	Final result all confirmatory tests	Final Result SureTect STEC 8h		Agreement 8h	Final result PCR 24h	Final result all confirmatory tests	Final Result SureTect STEC 24h		Agreement 24h	
			Strain	Inoculation Level CFU/sample	Global result	Sero-group			Global result	Sero-group				Global result	Sero-group		
3584	Beef trim	25g	<i>E. coli</i> O157:H7 803	2.6	-	/	0157	0157	+	0157	PD	0157	0157	+	0157	PD	1 a
3585	Beef trim		<i>E. coli</i> O145:H28 1867-177	3.0	-	/	0145/0103	0145	+	0145	PD	0145	0145	+	0145	PD	1 a
3586	Beef trim		<i>E. coli</i> O26:H11 1377-1382073	1.8	-	/	026	026	+	026	PD	026	026	+	026	PD	1 a
3588	Beef trim		<i>E. coli</i> O111 Ad3042	2.8	-	/	0111	0111	+	0111	PD	0111	0111	+	0111	PD	1 a
7793	Veal meat		<i>E. coli</i> O145 092-4	4.0	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	1 a
7794	Pork meat		<i>E. coli</i> O157 769	4.0	-	/	0157	0157	+	0157	PD	0157	0157	+	0157	PD	1 a
8144	Raw pork meat		<i>E. coli</i> O145:H28 1331-100	1.2	-	0157	0145	0145	+	0145	PD	0145	0145	+	0145	PD	1 a
269	Lamb meat		<i>E. coli</i> O103 Ad1772	2.6	-	/	0103	0103	+	0103	PD	0103	0103	+	0103	PD	1 a
541	Seasoned beef meat		<i>E. coli</i> O111 Ad511	1.0	-	/	0111	0111	+	0111	PD	0111	0111	+	0111	PD	1 b
543	Marinated beef meat		<i>E. coli</i> O145:H28 1331-100	1.6	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	1 b
545	Marinated beef meat		<i>E. coli</i> O157 Ad488	2.0	-	/	0157	0157	+	0157	PD	0157	0157	+	0157	PD	1 b
547	Marinated beef meat		<i>E. coli</i> O111 Ad511	1.0	-	/	0111	0111	+	0111	PD	0111	0111	+	0111	PD	1 b
542	Marinated beef meat		<i>E. coli</i> O145:H28 1331-100	1.6	-	/	0145	0145	-	/	PD	0145	0145	+	0145	PD	1 b
3281	Frozen ground beef		<i>E. coli</i> O145:H28 1502-105	3.0	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	1 c
3282	Frozen beef trim		<i>E. coli</i> O145:H28 1502-105	3.0	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	1 c
3440	Raw pork trim	375g	<i>E. coli</i> O145:H28 2305-1	1.8	-	/	026/0103/ 0145/045/ 0121	0145	+	0145	PD	-/-	0145	-	/	NA	1 a
3445	Raw beef trim		<i>E. coli</i> O145:H28 1502-105	1.2	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	1 a
3958	Raw beef trim		<i>E. coli</i> O157:H7 Ad222	5.0	-	/	0157	0157	+	0157	PD	0157	0157	+	0157	PD	1 a
3960	Raw veal trim		<i>E. coli</i> O103:H2 V92-362	1.8	-	/	0103/0111/ 026	0103/0157 (72h)	+	0157	PD	0103/0111/ 026/045/ 0121	0103	+	0103	PD	1 a
4338	Raw lamb trim		<i>E. coli</i> O103:H2 262-03-18-1	2.2	-	/	0103/026/ 045/0121	0103	+	0103	PD	0103/026/ 045/0121	0103	+	0103	PD	1 a
4339	Raw lamb trim		<i>E. coli</i> O26:H11 1377-135 lot 3	2.4	-	/	026	026	+	026	PD	026	026	+	026	PD	1 a
4340	Raw beef trim		<i>E. coli</i> O157:H7 670T	2.8	-	/	0157	0157	+	0157	PD	0157	0157	+	0157	PD	1 a
4341	Raw ground beef		<i>E. coli</i> O111 Ad3037	0.6	-	/	0111	0111	+	0111	PD	0111	0111	+	0111	PD	1 a
4342	Marinated pork meat		<i>E. coli</i> O26:H11 1377-135 lot 3	2.4	-	/	026	026	+	026	PD	026	026	+	026	PD	1 b
4344	Seasoned veal meat		<i>E. coli</i> O157:H7 670T	2.8	-	/	0157	0157	+	0157	PD	0157	0157	+	0157	PD	1 b
3514	Frozen brined veal meat		<i>E. coli</i> O26 Ad3109	4.2	-	/	026	026	+	026	PD	026	026	+	026	PD	1 c

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

Sample N°	Product	Test portion	Artificial contamination		ISO/TS 13136 [*] Result		Alternative method: SureTect STEC (Raw meat products and Vegetables including fruits)									Category	Type			
							8 h or 10 h incubation time				24 h incubation time									
			Strain	Inoculation Level CFU/sample	Global result	Sero-group	Final result PCR 8h	Final result all confirmatory tests	Final Result SureTect STEC 8h		Agreement 8h	Final result PCR 24h	Final result all confirmatory tests	Final Result SureTect STEC 24h		Agreement 24h				
									Global result	Sero-group				Global result	Sero-group					
4691	Sprouts (alfalfa, lentils, leeks)	25g	<i>E. coli</i> O157:H7 Ad558	5.2	-	/	0157	0157	+	0157	PD	0157	0157	+	0157	PD	3	a		
4693	Sprouts (alfalfa, radish, fennel)		<i>E. coli</i> O145 Ad983	5.2	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	3	a		
4699	Sprouts (leeks)		<i>E. coli</i> O111:H8 Ad511	4.8	-	/	-	0111	-	/	NA	0111	0111	+	0111	PD	3	a		
4695	Sprouts (alfalfa)		<i>E. coli</i> O26 Ad980	7.2	-	/	026	026	+	026	PD	026	026	+	026	PD	3	a		
5041	Frozen vegetables (peas)		<i>E. coli</i> O103 Ad1772	7.2	-	/	0103	0103	+	0103	PD	0103/O145/O45/O121		0103	+	0103	PD	3	b	
256	Grated carrots MAP		<i>E. coli</i> O145 Ad983	1.8	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	3	b		
259	Tomatoes RTE		<i>E. coli</i> O145 Ad983	1.8	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	3	b		
260	Radish RTE		<i>E. coli</i> O103 Ad1772	2.6	-	/	0103	0103	+	0103	PD	0103	0103	+	0103	PD	3	b		
350	Cut vegetables MAP		<i>E. coli</i> O111 Ad981	3.0	-	/	0111	0111	+	0111	PD	0111	0111	+	0111	PD	3	b		
261	Fruit salad		<i>E. coli</i> O111 Ad981	2.0	-	/	0111	0111	+	0111	PD	0111		+	0111	PD	3	c		
265	Fruit juice		<i>E. coli</i> O111:H8 Ad3021	2.4	-	/	0111	0111	+	0111	PD	0111	0111	+	0111	PD	3	c		
206	Frozen strawberry		<i>E. coli</i> O111 Ad3037	6.8	-	/	0111	0111	+	0111	PD	0111	0111	+	0111	PD	3	c		
3799	Baby leaves (Mesclun)	375g	<i>E. coli</i> O157:H7 Ad3118	4.6	-	/	0157/O103/O26/O45/O121		0157 (72h)	+	0157	PD	0157/O103/O26/O45/O121		0157	+	0157	PD	3	a
3804	Mixed baby leaves		<i>E. coli</i> O111 Ad3037	3.8	-	/	0111	0111	+	0111	PD	0111	0111	+	0111	PD	3	a		
3808	Baby leaves (Spinach)		<i>E. coli</i> O103 Ad2309	4.8	-	/	0103	0103	+	0103	PD	0103	0103	+	0103	PD	3	a		
4105	Curly lettuce		<i>E. coli</i> O26 Ad1777	3.0	-	/	0157/O26	026 (72h)	+	026	PD	026	026(72h)		+	026	PD	3	a	
4113	Mix vegetables MAP		<i>E. coli</i> O145 Ad984	2.2	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	3	b		
7	Grated carrots MAP		<i>E. coli</i> O145 Ad984	1.2	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	3	b		
4109	Cut watermelon		<i>E. coli</i> O145 Ad984	2.2	-	/	0145	0145	+	0145	PD	0145	0145	+	0145	PD	3	c		
9	Fresh juice (pineapple, passion fruits)		<i>E. coli</i> O111 Ad3021	0.6	-	/	0111	0111	+	0111	PD	0111	0111	+	0111	PD	3	c		

Sample N°	Product	Artificial contamination		ISO/TS 13136* Result		Alternative method: SureTect STEC (Dairy products)				Category	Type	
						16 h incubation time						
						Final result PCR 16 h	Final result all confirmatory tests	Final result SureTect STEC		Agreement		
Strain	Inoculation Level CFU/sample	Global result	Serogroup					Global result	Serogroup			
7931	Raw cow milk	<i>E. coli</i> O26 Ad3056	2.6	-	/	O26	O26	+	O26	PD	2 a	
7932	Raw cow milk	<i>E. coli</i> O103 Ad3051	1.8	-	/	O103	O111	+	O111	PD	2 a	
8043	Raw cow milk	<i>E. coli</i> O157 Ad2843	0.6	-	/	O157	O157	+	O157	PD	2 a	
8390	Raw cow milk	<i>E. coli</i> O103:H2 1144	1.8	-	/	O103	O103	+	O103	PD	2 a	
8394	Raw goat milk cheese	<i>E. coli</i> O103 Ad2839	3.8	-	/	O103	O103	+	O103	PD	2 b	
181	Raw cow milk cheese	<i>E. coli</i> O26 Ad2827	4.0	-	/	O26	O26	+	O26	PD	2 b	
8036	Raw cow milk cheese	<i>E. coli</i> O111 Ad3041	1.4	-	/	O103	O111	+	O111	PD	2 b	
8037	Raw cow milk cheese	<i>E. coli</i> O157 Ad2843	0.6	-	/	O157	O157	+	O157	PD	2 b	
8039	Raw ewe milk cheese	<i>E. coli</i> O145 Ad3020	2.4	-	/	O145	O145	+	O145	PD	2 b	
8041	Raw goat milk cheese	<i>E. coli</i> O145 Ad3020	2.4	-	/	O145	O145	+	O145	PD	2 b	
8072	Raw cow milk cheese	/	/	-	/	O103	O103	+	O103	PD	2 b	
8047	Pasteurised goat milk cheese	<i>E. coli</i> O145 Ad3020	2.4	-	/	O145	O145	+	O145	PD	2 c	
8146	Pasteurised cow milk cheese	<i>E. coli</i> O103 Ad2977	5.2	-	/	O103	O103	+	O103	PD	2 c	
8147	Pasteurised ewe milk cheese	<i>E. coli</i> O26 Ad3034	1.6	-	/	O26	O26	+	O26	PD	2 c	

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

> **Samples in negative agreement with positive confirmation**

Combining all the categories and tests portions, for five samples in negative agreement, the presence of STEC belonging to the target serogroups was confirmed in the enrichment broth; they are listed in **Table 10**.

Table 10 - Samples in negative agreement confirmed positive by cultural method

Category	Sample	Product	Test portion	Incubation time	SureTect STEC PCR Result			Confirmation	
					stx	eae	O group		
1	3440	Raw pork trim	375 g	24h	-/-	37.1/-/41.94	/	O145 after IMS	
	3441	Raw pork trim		24h	28.71/ 31.35/30.13	27.94/30.71/ 29.30	-/-	O157 after IMS	
				24h + 72 h storage	29.98/ 31.73/30.11	29.10/31.54/ 28.52	-/-	O157 after IMS	
	3958	Raw beef trim		24h + 72 h storage	-/-	-/-	-	O157 after direct streaking	
2	8148	Pasteurised cow milk	25 g	16h	+ (36.21) / - + (38.79)	+ (38.43) / -	-/+ (37.18) / -	O111 after direct streaking	
3	4699	Sprouts (leeks)	25 g	8 h	+ (37.45)	+ (37.91)	-/-	O111 after IMS dilution	

The analyses of discordant results according to the EN ISO 16140-2:2016 is the following (See **Table 11**).

Table 11 - Analyses of discordant results

Category		Test portion	Protocol	Incubation time	Type	N+	ND	PPND	PD	(ND+ PPND) -PD	Unpaired AL		
1	Raw meat products (excluding poultry)	25 g	Pre-warmed BPW at 41.5°C	8 h	a Raw (beef, veal, pork, lamb, etc.)	10	0	0	8	-8			
					b Seasoned and marinated (beef, veal, pork, lamb, etc.)	10	2	0	5	-3			
					c Frozen (beef, veal, pork, lamb, etc.)	11	3	0	2	1			
				Total		31	5	0	15	-10	3		
				24 h	a Raw (beef, veal, pork, lamb, etc.)	10	0	0	8	-8			
					b Seasoned and marinated (beef, veal, pork, lamb, etc.)	10	2	0	5	-3			
					c Frozen (beef, veal, pork, lamb, etc.)	11	3	0	2	1			
		375 g	Pre-warmed BPW at 41.5°C		Total		31	5	0	15	-10	3	
			8 h	a Raw (beef, veal, pork, lamb, etc.)	10	1	0	8	-7				
				b Seasoned and marinated (beef, veal, pork, lamb, etc.)	12	4	0	2	2				
				c Frozen (beef, veal, pork, lamb, etc.)	10	0	0	1	-1				
			Total		32	5	0	11	-6	3			
2	Dairy products	25 g	BPW+5m g/L acriflavin at 41.5°C	16 h	a Raw milk	12	2	0	4	-2			
					b Raw milk cheeses	9	1	0	7	-6			
					c Pasteurised milk and cheeses	10	3	0	3	0			
				Total		31	6	0	14	-8	3		
3	Vegetables including fruits	25 g	Pre-warmed BPW at 41.5°C	8 h	a Sprouted seeds and leafy greens	10	4	0	3	1			
					b Vegetables (unprocessed, frozen, and cut)	12	1	0	5	-4			
					c Fruits and juices (fresh and frozen, unprocessed or cut)	11	2	0	3	-1			
				Total		33	7	0	11	-4	3		
				24 h	a Sprouted seeds and leafy greens	11	4	0	4	0			
					b Vegetables (unprocessed, frozen and cut)	12	1	0	5	-4			
					c Fruits and juices (fresh and frozen, unprocessed or cut)	11	2	0	3	-1			
				Total		34	7	0	12	-5	3		
		375 g (excluding sprouted seeds)	Pre-warmed BPW at 41.5°C	10 h	a Leafy greens	12	1	0	4	-3			
					b Vegetables (unprocessed, frozen, and cut)	12	4	0	2	2			
					c Fruits and juices (fresh and frozen, unprocessed or cut)	12	3	0	2	1			
				Total		36	8	0	8	0	3		
				24 h	a Leafy greens	12	1	0	4	-3			
					b Vegetables (unprocessed, frozen, and cut)	12	3	0	2	1			
					c Fruits and juices (fresh and frozen, unprocessed or cut)	12	2	0	2	0			
				Total		36	6	0	8	-2	3		
All categories and test portions		Short protocol: 8 h or 10 h respectively for meat, vegetables, and 16 h for dairy				163	31	0	59	-28	5		
		16 h for dairy and 24 h for meat and vegetables				163	28	0	59	-31	5		

The observed values for ((ND+PPND) - PD) meet the acceptability limit for each individual category, each test portion (25 g and 375 g) and for all the combined categories and test portions (calculated values \leq AL) whatever the incubation time applied for raw meat and raw vegetables including fruits (8 h, 10 h or 24 h).

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

During the validation, among the 191 samples stored for 72 h at $5^{\circ}\text{C} \pm 3^{\circ}\text{C}$, 28 samples (*) were stored for more than 72 h (several months as it was not initially stated that the 72 h storage had to be tested) 191 samples were stored at 72 h at $5^{\circ}\text{C} \pm 3^{\circ}\text{C}$.

Twenty-one changes were observed (See **Table 12**); 12 of these samples were stored longer than expected. Out of these 12 samples, only three samples had a different PCR and confirmatory result before and after storage. The other nine samples remained PCR positive, however culture confirmation was not possible. This may be due to the viability of the target organism during the prolonged storage period or due to increased background microflora, which could make confirmation more challenging. Note that the sensitivity study testing started with raw meat (25 g test portion) and vegetables (25 g test portion), and therefore the samples with an enrichment storage longer than expected are gathered in those two categories. Only 5.7% of modifications were observed on samples stored at the proper storage time of 72 h.

For the extension study (2021), three changes were observed: two of them (N°3804 after 10 h and N°38) were linked to the PCR result modification, and one to the impossibility to confirm the presence of the strain in the enrichment broth (sample N°3804, 24 h).

Table 12 - Evolution of the confirmation results before and after storage of the enrichment broth

Sample N°	Product	Test portion	Alternative method: SureTect STEC (Raw meat products and vegetables including fruits)						Category	Type		
			8 h or 10 h incubation time									
			Before storage			After storage						
			Final Result PCR	Final result all confirmatory tests	Agree-ment	Final result PCR	Final result all confirmatory tests	Agree-ment				
3584*	Beef trim	25 g	O157	O157	PD	O157	-	PPNA	1	a		
3588*	Beef trim	25 g	O111	O111	PD	O111	-	PPNA	1	a		
3589*	Ground beef	25 g	O157	O157	PA	-/-	-	ND	1	a		
3962	Raw lamb trim	375 g	-/-	O145	ND	O145	O145	PA	1	a		
3965	Seasoned veal meat	375 g	O157	O157	PA	O157/ O45/O121	-	PPND	1	b		
3282*	Frozen beef trim	25 g	O145	O145	PD	O145	-	PPNA	1	c		
4691*	Sprouts (alfalfa, lentils, leeks)	25 g	O157	O157	PD	O157	-	PPNA	3	a		
4693*	Sprouts (alfalfa, radish, fennel)	25 g	O145	O145	PD	O145/ O45/O121	-	PPNA	3	a		
4695*	Sprouts (alfalfa)	25 g	O26	O26	PD	-/-	O26	NA	3	a		
4698*	Celery branche	25 g	O103	O103	PA	-/-	O26	ND	3	a		
3804	Mixed baby leaves	375 g	O111	O111	PD	-/-O111	O111	NA	3	a		
38	Frozen figs	375 g	-/O103/O103	O103	ND	O103	O103	PA	3	c		

Sample N°	Product	Test portion	Alternative method: SureTect STEC (Raw meat products and vegetables including fruits)						Category	Type		
			24 h incubation time									
			Before storage			After storage						
			Final result PCR	Final result all confirmatory tests	Agree-ment	Final Result PCR	Final result all confirmatory tests	Agree-ment				
3584*	Beef trim	25 g	O157	O157	PD	O157	-	PPNA	1	a		
3589*	Ground beef	25 g	O157	O157	PA	O157	-	PPND	1	a		
3440	Raw pork meat	375 g	-/-	O145	NA	O26/O103/ O145	O145	PD	1	a		
3958	Raw beef meat	375 g	O157	O157	PD	-/-	O157	NA	1	a		
4695*	Sprouts (alfalfa)	25 g	O26	O26	PD	O26	-	PPNA	3	a		
5041*	Frozen vegetables (peas)	25 g	O103/ O145/ O45/O121	O103	PD	O103	-	PPNA	3	b		
3804	Mix of baby leaves	375 g	O111	O111	PD	O111	-	PPNA	3	a		

Sample N°	Product	Alternative method: SureTect STEC (Dairy products)						Category	Type		
		16 h incubation time									
		Before storage			After storage						
		Final result PCR	Final result all confirmatory tests	Agree-ment	Final Result PCR	Final result all confirmatory tests	Agree-ment				
8389	Raw ewe milk	O26	O26	PA	-/O26/O26	O26	ND	2	a		
8072	Raw cow milk cheese	O103	O103	PD	-/O103/-	O103	NA	2	b		

12 changes were observed after 8 h or 10 h incubation time:

- Four for the meat category 25 g and two for 375 g,
- Four for the vegetables including fruits category 25 g, and 2 for 375 g.

Seven changes were observed after 24 h incubation time:

- Two for the meat category 25 g and two for 375 g,
- Two for the vegetables including fruits category 25 g and one for 375 g.

Two changes were observed for the dairy products category.

For 11 samples: 3282, 3584, 3588, 4691, 4693, 3965 (after 8 h incubation time), 3584, 3589, 4695, 5041, 3804 (after 24 h incubation time), a positive PCR was obtained with a negative confirmation. For all those samples, except samples 3965 and 3804, the enrichment broths were stored much longer than 72 h; this could easily explain the fact that the confirmation was not possible anymore.

For seven samples: 3589, 4695, 4698 (after 8 h incubation time), 3804 (after 10 h incubation time), 8072, 8384 (after 16 h incubation time) and 3958 (after 24 h incubation time), a negative PCR was obtained. For six of them (3804, 4695, 4698, 8072, 3958 and 8389), the presence of STEC belonging to the target serogroups was confirmed in the enrichment broth. Again, all these samples, except 3804 and 3958, were stored longer than expected.

Despite the encountered issue, the analyses of discordant fulfil the ISO 16140-2:2016 requirements (See **Table 13**).

Table 13 - Analysis of discordant after storage 72 h at 5 ± 3°C

						Unpaired								
Category	Test portion	Protocol	Incubation time	Type	ND	PPND	PD	(ND+PPND)-PD	AL					
1 Raw meat (excluding poultry)	25 g	Pre-warmed BPW at 41.5°C	8 h	a Chilled raw (pork, beef, veal, lamb...)	1	0	6	-5						
				b Frozen (pork, beef, veal, lamb...)	2	0	5	-3						
				c Seasoned and marinated (pork, beef, veal, lamb...)	3	0	1	2						
			Total		6	0	12	-6	3					
			24 h	a Chilled raw (pork, beef, veal, lamb...)	0	1	7	-6						
				b Frozen (pork, beef, veal, lamb...)	2	0	5	-3						
				c Seasoned and marinated (pork, beef, veal, lamb...)	3	0	2	1						
	375 g	Pre-warmed BPW at 41.5°C	8 h	Total	5	1	14	-8	3					
				a Chilled raw (pork, beef, veal, lamb...)	0	0	8	-8						
				b Frozen (pork, beef, veal, lamb...)	4	1	2	3						
			24 h	c Seasoned and marinated (pork, beef, veal, lamb...)	0	0	1	-1						
				Total	4	1	11	-6	3					
2 Dairy products	25 g	BPW+ 5mg/L acriflavin 16 h at 41.5°C	16	a Raw milk	3	0	4	-1						
				b Raw milk cheeses	1	0	6	-5						
				c Pasteurised milk and cheeses	3	0	3	0						
			Total		7	0	13	-6	3					
			25 g	8 h	a Sprouted seeds and leafy greens	4	1	0	5					
3 Vegetables including fruits					b Vegetables (unprocessed, frozen and cut)	1	0	5	-4					
					c Fruits and juices (fresh and frozen, unprocessed or cut)	2	0	3	-1					
					Total	7	1	8	0	3				
24 h				a Sprouted seeds and leafy greens	4	0	3	1						
				b Vegetables (unprocessed, frozen and cut)	1	0	4	-3						
				c Fruits and juices (fresh and frozen, unprocessed or cut)	2	0	3	-1						
375 g (excluding sprouted seeds)			Total	7	0	10	-3	3						
			10 h	a Leafy greens	1	0	3	-2						
				b Vegetables (unprocessed, frozen and cut)	4	0	2	2						
				c Fruits and juices (fresh and frozen, unprocessed or cut)	2	0	2	0						
			24 h	Total	7	0	7	0	3					
				a Leafy greens	1	0	3	-2						
				b Vegetables (unprocessed, frozen and cut)	3	0	2	1						
				c Fruits and juices (fresh and frozen, unprocessed or cut)	2	0	2	0						
All categories and test portions				Short protocol: 8 h or 10 h respectively for meat, vegetables, and 16 h for dairy				31	2	51	-18	5		
				16 h for dairy and 24 h for meat and vegetables				29	1	54	-24	5		

The observed values for ((ND+PPND) - PD) meet the acceptability limit for each individual category, each test portion (25 g and 375 g) and for all the combined categories and test portions (calculated values \leq AL) whatever the incubation time applied for raw meat and raw vegetables including fruits (8 h, 10 h or 24 h).

3.1.1.8 Confirmation

Three confirmation protocols were applied during the study:

- Direct streaking onto selective agar plates (CHROMagar STEC, CT-SMAC, Chromogenic Coliform Agar (CCA), TBX (optional)),
- IMS step before streaking,
- Diluted IMS (immunobeads dilutions: -1, -2, -3) step before streaking.

The number of samples confirmed by direct streaking and the number of additional samples confirmed using IMS (with or without dilution) is given in **Table 14**.

Table 14 - Confirmation

Protocol	Before storage					After storage					Total	%
	8 h or 10 h	16 h	24 h	Total	%	8 h or 10 h	16 h	24 h	Total	%		
Number of positive PCR results	112	25	117	254	/	112	24	117	253	/	507	/
Number of samples confirmed by direct streaking	94	21	98	213	83.9%	85	21	93	199	78.7%	412	81%
Number of additional samples confirmed by IMS	10	3	7	20	7.9%	12	1	7	20	7.9%	40	8%
Number of additional samples confirmed by alternative protocol (IMS diluted)	1	1	3	5	2.0%	1	1	5	7	2.8%	12	2%
Number of samples not confirmed (PPNC)	5	0	7	12	4.7%	13	1	12	26	10.3%	38	7%

PPNC: Positive Presumptive Not Confirmed

The percentage of samples not confirmed after storage 72 h at $5 \pm 3^\circ\text{C}$ is higher (10.3%) than the percentage of samples not confirmed before storage (4.7%). This could be due to the fact that some samples were stored longer than exceptive (see 3.1.7.).

Two vegetables samples (375 g test portion) N°3799 and N°4105 were confirmed only after enriched broth storage.

Latex tests (Thermo Fisher O157, Remel O157:H7 and Prolex non-O157 latex) were used to confirm the typical colonies isolated from selective agar plates. All the tested colonies gave the same confirmation result using the latex test or the SureTect Escherichia coli O157:H7 and STEC Screening PCR Assay, except in the following cases (See **Table 15**):

Table 15 – Differences between Latex test and PCR test results

N° sample	Incubation time	Media	Latex result	PCR result
257	24 h	DS CCA and CH	O26-	O26+
8048	16 h	DS TBX	O103-	O103+
		IMS TBX	O103-	O103+
	16 h and 72 h	DS TBX	O103-	O103+
8148	16 h	DS CH	O111-	O111+

DS = Direct Streaking

CH = CHROMagar STEC

3.1.1.9 PCR inhibition

The number of enrichment broths tested was 937, using two PCR kits (SureTect Escherichia coli O157:H7 and STEC Screening PCR Assay SureTect Escherichia coli STEC Identification PCR Assay) representing 1874 PCR tests. No PCR inhibition was observed on DNA extract from enriched broth.

3.1.2 *Relative level of detection*

The relative level of detection is the level of detection at P = 0.50 (LOD₅₀) of the alternative (proprietary) method divided by the level of detection at P = 0.50 (LOD₅₀) 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.

3.1.2.1 *Experimental design*

One sample type and one relevant target micro-organism for each sample type was chosen for each category. Five matrix/strain pairs were tested, in order to cover all the serogroups included in the validation study as well as the two protocols (See **Table 16**).

For the raw meat and vegetables including fruits categories (375 g test portion), the RLOD determination was performed using 25 g test portions for the reference method and 375 g test portions for the alternative method.

The following protocol was applied:

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

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

Table 16 - Defined (matrix/strain) pairs for the RLOD determination

Category		Test portion	Matrix	Strain	Origin	Storage conditions before analysis	Protocol and incubation time	Study design
1	Raw meats (excluding poultry)	25 g	Frozen raw ground beef	<i>E. coli</i> O157:H7 Ad683 (stx1+, stx2+, eae+)	Beef meat	2 weeks at -20°C	Pre-warmed BPW (41.5°C) 1-in-10 dilution 8 - 24 h at 41.5°C	Unpaired
		375 g	Frozen ground beef	<i>E. coli</i> O145:H28 1502-105 (stx1-, stx2+, eae+)	Meat product	2 weeks at -20°C	Pre-warmed BPW (41.5°C) 1-in-5 dilution 8 - 24 h at 41.5°C	
2	Dairy products	25 g	Raw milk	<i>E. coli</i> O26 Ad1741 (stx1+, stx2+, eae+)	Raw milk cheese	48 h at 5°C ± 3°C	BPW supplemented with 5mg/L acriflavin 1-in-10 dilution 16 - 24 h at 41.5°C	Unpaired
			Raw milk cheese	<i>E. coli</i> O103:H2 03-35 (stx1+, stx2-, eae+)	Raw milk cheese	48 h at 5°C ± 3°C		
3	Vegetables including fruits	25 g	Baby leaves	<i>E. coli</i> O111 Ad981 (stx1+, stx2+, eae+)	Clinic	48 h at 5°C ± 3°C	Pre-warmed BPW (41.5°C) 1-in-10 dilution 8 - 24 h at 41.5°C	Unpaired
			Fresh tomatoes	<i>E. coli</i> O145:H28 092-4 (stx1+, stx2+, eae+)	Meat product	48 h at 5°C ± 3°C	Pre-warmed BPW (41.5°C) 1-in-10 dilution 8 - 24 h at 41.5°C	
		375 g (excluding sprouted seeds)	Baby leaves	<i>E. coli</i> O157:H7 Ad3118 (stx1+, stx2+, eae+)	Sprouts	48 h at 5°C ± 3°C	Pre-warmed BPW (41.5°C) 1-in-10 dilution 10 - 24 h at 41.5°C	

3.1.2.2 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 **Table 17**.

Table 17 – Presentation of RLOD before and after confirmation of the alternative method results

Category	(Strain / matrix) pair	RLOD	RLODL	RLODU	b=ln (RLOD)	sd(b)	z-Test statistic	p-value	AL
1	Ground Beef / <i>E. coli</i> O157:H7 Ad683 8 h - 25 g	0.868	0.392	1.926	-0.141	0.398	0.354	1.277	2.5
	Ground Beef / <i>E. coli</i> O157:H7 Ad683 24 h - 25 g	0.868	0.392	1.926	-0.141	0.398	0.354	1.277	
	Ground Beef / <i>E. coli</i> O145:H28 1502-105 8 h - 375 g for the alternative method (25 g for the reference method)	1.337	0.604	2.958	0.290	0.397	0.731	0.465	
	Ground Beef / <i>E. coli</i> O145:H28 1502-105 24 h - 375 g for the alternative method (25 g for the reference method)	1.161	0.528	2.553	0.149	0.394	0.379	0.705	
2	Raw milk cheese / <i>E. coli</i> O103:H2 03-35 16 h- 25 g	1.676	0.579	4.856	0.516	0.532	0.971	0.332	2.5
	Raw milk / <i>E. coli</i> O126 Ad1741 16 h - 25 g	0.635	0.286	1.410	-0.455	0.399	1.140	1.746	
3	Tomatoes / <i>E. coli</i> O145 Ad983 8 hours - 25 g	2.193	0.964	4.992	0.785	0.411	1.910	0.056	2.5
	Tomatoes / <i>E. coli</i> O145 Ad983 24 h - 25 g	2.193	0.964	4.992	0.785	0.411	1.910	0.056	
	Baby Leaves / <i>E. coli</i> O111 Ad981 8 h - 25 g	0.764	0.266	2.193	-0.269	0.527	0.510	1.390	
	Baby Leaves / <i>E. coli</i> O111 Ad981 24 h - 25 g	0.764	0.266	2.193	-0.269	0.527	0.510	1.390	
	Baby leaves / <i>E. coli</i> O157:H7 Ad3118 10 h - 375 g	0.557	0.220	1.416	-0.584	0.466	1.254	1.790	
	Baby leaves / <i>E. coli</i> O157:H7 Ad3118 24 h - 375 g	0.557	0.220	1.416	-0.584	0.466	1.254	1.790	
Combined	Short protocol: 8 h or 10 h respectively for meat, vegetables, and 16 h for dairy	0.984	0.736	1.316	-0.016	0.145	0.112	1.090	2.5
	16 h for dairy and 24 h for meat and vegetables	0.968	0.724	1.295	-0.032	0.145	0.221	1.175	

For the raw meat (375 g) RLOD, one sample (4507) was not detected (*stx* target negative) after 8 h incubation time while the confirmation concluded to the presence of the strain in the enrichment broth; this explains the difference observed in the RLOD calculation between both incubation times for this matrix.

The LOD₅₀ % calculations according to Wilrich & Wilrich POD-LOD calculation program – version 12, 2024-03-05 are given in **Table 18**.

Table 18 – LOD₅₀ results

Category	(Strain / matrix) pair	Level of detection at 50% (CFU / sample size) according to Wilrich & Wilrich ²	
		Reference method	Alternative method
1	Ground Beef / <i>E. coli</i> O157:H7 Ad683 8 h - 25 g	0.8 [0.5;1.4]	0.7 [0.4;1.2]
	Ground Beef / <i>E. coli</i> O157:H7 Ad683 24 h - 25 g		
	Ground Beef / <i>E. coli</i> O145:H28 1502-105 8 h - 375 g for the alternative method (25 g for the reference method)	0.4 [0.2;0.7]	0.5 [0.3;0.9]
	Ground Beef / <i>E. coli</i> O145:H28 1502-105 24 h - 375 g for the alternative method (25 g for the reference method)		0.5 [0.3;0.8]
2	Raw milk cheese / <i>E. coli</i> O103:H2 03-35 16 h - 25 g	1.5 [0.9;2.9]	2.1 [1.2;3.9]
	Raw milk / <i>E. coli</i> O126 Ad1741 16 h - 25 g	1.5 [0.9;2.6]	1.0 [0.6;1.7]
3	Tomatoes / <i>E. coli</i> O145 Ad983 8 h - 25 g	0.4 [0.2;0.6]	0.8 [0.4;1.4]
	Tomatoes / <i>E. coli</i> O145 Ad983 24 h - 25 g		
	Baby Leaves / <i>E. coli</i> O111 Ad981 8 h - 25 g	3.4 [1.5;7.5]	2.5 [1.2;5.2]
	Baby Leaves / <i>E. coli</i> O111 Ad981 24 h - 25 g		
	Baby leaves / <i>E. coli</i> O157:H7 Ad3118 10 h - 375 g	1.0 [0.9;1.3]	0.6 [0.3;1.1]
	Baby leaves / <i>E. coli</i> O157:H7 Ad3118 24 h - 375 g		
Combined	Short protocol: 8 h or 10 h respectively for meat, vegetables, and 16 h for dairy	1.1 [0.9;1.3]	1.0 [0.8;1.7]
	16 h for dairy and 24 h for meat and vegetables		1.0 [0.8;1.2]

² 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.

3.1.2.3 Conclusion

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

The LOD₅₀ varies from 0.4 to 3.4 CFU/sample size for the reference method and from 0.5 to 2.5 CFU/ sample size for the alternative method.

3.1.3 Inclusivity / exclusivity

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

3.1.3.1 Test protocols

➤ Inclusivity

E. coli strain cultures were cultured in Brain Heart Infusion (BHI) medium at 37°C. Dilutions were done in order to inoculate 10 - 100 cells/225 mL of BPW + 5mg/L acriflavin. The broth was incubated for 16 h at 41.5°C. A 1-in-2 dilution was applied on the enrichment both (1 mL + 1 mL BPW) before extraction step and PCR. The confirmations were done by direct streaking on selective agar plates.

As the scope of the validation is shiga-toxin-producing *Escherichia coli* (STEC) including target five serogroups, 50 strains covering the following targets: *stx+*, *eae+*, serogroup +, O26, O103, O111, O145, O157 were tested. The distribution was the following (See **Table 19**).

Table 19 - Distribution of the strains per serogroup

Number of strains tested						
Genes	O26	O103	O111	O145	O157	Total
<i>stx+, eae+</i> serogroup +	12	10	7	7	14	50

> Exclusivity

The non-target strains (30) were grown in BHI medium. Dilutions were done in order to inoculate 10^5 cells/ml of BPW. The broths were incubated for 24 h at 37°C. The alternative protocol was then performed.

3.1.3.2 Results

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

> Inclusivity

The 50 target strains tested gave positive PCR results. Thirty-one strains gave typical colonies on Chromogenic Coliform Agar (CCA); 14 strains gave pink colonies and five strains white colonies,

Thirteen *E. coli* O157:H7 strains gave typical colonies on CT-SMAC. One strain, *E. coli* O157:H7 52-33 (n° 34), was not able to grow on this selective agar plate but gave typical colonies on CCA and CHROMAgar STEC.

Forty-six strains gave typical colonies on CHROMAgar STEC; four strains were not able to grow on this selective agar plate. However, all the strains were confirmed on one selective agar plate at least.

All the typical colonies gave a positive latex test and a positive PCR result (tested from CT-SMAC for O157 group and from CCA for other serogroups).

> Exclusivity

No cross reaction was observed with the 30 non-target strains tested.

The SureTect STEC method for detection of Shiga-toxin-producing *Escherichia coli* (STEC) from O26, O103, O111, O145 and O157 is specific and selective.

3.1.4 Practicability

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

Storage conditions, shelf-life and modalities of utilisation after first use	Store the kits protected from light, at 2 - 8°C. Bring to room temperature before opening. Expiration date: the information is provided on the kits.		
Time to result	Steps	Reference method	Alternative method
Negative samples			
Sampling	Day 0	Day 0	
Lysis and PCR	Day 1	Day 0 (protocol 8 h or 10 h) or Day 1	
Final result	Day 1	Day 1	
Presumptive positive or positive results			
Sampling	Day 0	Day 0	
Lysis and PCR	Day 1	Day 0 (protocol 8 h or 10 h) or Day 1	
Direct streaking or IMS	Day 1	Day 0 or Day 1	
Reading plates	Day 2	Day 1 or Day 2	
Confirmation	Day 2	Day 1 or Day 2	
Final result	Day 2	Day 1 or Day 2	
Common step with the reference method	No common step with the reference method		

The negative results were available the day of initiating the analyses for the meat and the vegetables including fruits categories (8 h or 10 h incubation time) and the positive result in one day.

The negative results were available in one day for the dairy products category and the positive results in two days.

The alternative method protocol is less time consuming and significantly easier to perform than the reference method.

3.2 Inter-laboratory study

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

3.2.1 Study organisation

➤ Collaborators number

Twelve laboratories were involved in the inter-laboratory study with two collaborators for four of them (G, H, I and J). Sixteen collaborators participated to the study.

➤ Matrix and strain used

Chilled ground beef samples were individually inoculated with *E. coli* O26:H11 12-62 (*stx1+*, *stx2-*, *eae+*) isolated from meat.

➤ Samples

Samples were prepared and inoculated on Monday 15th June 2020, as described below:

- Twenty-four blind coded samples (25 g) for shiga-toxin-producing *E. coli* (STEC) from O26, O103, O111, O145 and O157 detection by the Thermo Fisher SureTect Escherichia coli O157:H7 and STEC Screening PCR Assay and the Thermo Fisher SureTect Escherichia coli STEC Identification PCR Assay,
- Twenty-four blind coded samples (25 g) for shiga-toxin-producing *Escherichia coli* (STEC) from O26, O103, O111, O145 and O157 detection by the internal ADRIA method based on ISO/TS 13136 reference method,
- One sample for Aerobic mesophilic flora enumeration according to the ISO 4833-1 method,
- One water flask with a sensor probe.

> *Inoculation*

The targeted inoculation levels were the following:

- Level 0: 0 CFU/25 g,
- Level 1: 1 CFU/25 g,
- Level 2: 8 CFU/25 g.

> *Labelling and shipping*

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

A temperature control flask containing a sensor was added to the package in order to register the temperature profile:

- During the transport,
- At receipt,
- During storage until analyses,
- During the enrichment broth incubation for the alternative method.

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

> *Analyses*

Collaborative study laboratories and the expert laboratory carried out the analyses on Tuesday 16th June 2020 or Wednesday 17th June 2020 with the alternative and reference methods. **The analyses by the reference method and the alternative method should be performed on the same day.**

The protocol for Meat products was used during the study with the short incubation time, i.e. 8 h at 41.5°C ± 1°C. The confirmation of positive results was performed by direct streaking onto CCA and CHROMagar STEC selective agar plates.

The Collaborators analysed the samples by the internal method of ADRIA Développement based on the ISO/TS 13136. They proceeded, on all samples, to:

- Enrichment step,
- Extraction on enriched samples,
- Confirmation using the IMS protocol before streaking onto selective agar plates,
- Extraction from typical colonies isolated on TSA.

The DNA extracts from enriched samples and typical colonies were sent to ADRIA Développement in frozen conditions.

The Expert Laboratory performed the analysis with the internal method of ADRIA Développement based on the ISO/TS 13136 and the PCR tests (eae, stx, O26) on the DNA extracts from enriched samples prepared by the collaborators. The DNA extracts from typical colonies were tested only in case of discordances between the latex test performed by the collaborators on typical colonies and the expected result (O26 +).

3.2.2 Experimental parameters controls

3.2.2.1 Strain stability and background microflora stability

Strain stability was checked by inoculating the matrix at 1 CFU/25 g and 10³ CFU/g. Enumerations were performed for the high contamination level and detection analyses were performed for the low contamination level after 24 h, 48 h and 72 h storage at 3 ± 2°C. Triplicates were analysed. The aerobic mesophilic flora was also enumerated; the results are given in Table 20.

Table 20 - Sample stability

Day	Reference method (detection)			Alternative method (detection)			CFU/g (Enumeration)			Aerobic mesophilic flora (CFU/g)
	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3	Sample 1	Sample 2	Sample 3	
Day 0	+	+	+	+	+	+	1180	640	1090	190
Day 1	+	+	+	+	+	+	1530	1610	1400	250
Day 2	+	+	+	+	+	+	1200	1100	1300	340
Day 3	+	+	+	+	-	+	880	1120	900	670

No evolution was observed during storage at 3°C ± 2° for the *Escherichia coli* for 3 days storage.

A slight evolution was observed for the mesophilic aerobic flora enumeration between Day 0 and Day 3.

3.2.2.2 Contamination levels

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

Table 21 - Contamination levels

Level	Samples	Theoretical target level (CFU/sample)	True level (CFU/sample)	Low limit (CFU/sample)	High limit (CFU/sample)
Level 0	Coll. 1: 2/5/9/10/12/16/21/24 Coll.2: 25/28/31/34/38/42/46/47	0	/	/	/
Level 1	Coll.1: 1/6/11/13/18/20/22/23 Coll.2: 26/29/32/35/37/41/43/45	1	1.3	1.1	1.7
Level 2	Coll.1: 3/4/7/8/14/15/17/19 Coll.2: 27/30/33/36/39/40/44/48	8	12	1.3	14.8

3.2.3 Logistic conditions

The temperature measured at receipt by the Collaborators, the temperature registered by the thermo-probe, the receipt and analysis dates are given in Table 22.

Table 22 - Sample temperatures at receipt

Collaborators	Temperature measured by the probe (°C)	Temperature measured at receipt (°C)	Receipt date and time		Analysis date and time	
A	6.4	5.3	16/06/2020	08:50	16/06/2020 (23:00 pm)	08:00
B	2.6	5.1	16/06/2020	13:40	17/06/2020	07:10
C	7.5	6.9	16/06/2020	12:50	17/06/2020	07:45
D	9.7 (5 h > 8.0°C)	11.0	17/06/2020	08:15	17/06/2020	08:30
E	19.9 (23 h > 8.0)	20.0	17/06/2020	07:10	17/06/2020 for R ³ 18/06/2020 for A ⁴	08:30
F	10.3 (18 h > 8.0°C)	10.1	17/06/2020	06:00	17/06/2020	09:00
G1-G2	3.0	5.7	16/06/2020	06:45	16/06/2020	07:00
H1-H2	10.45 (8.5 h > 8.0°C)	11.1	16/06/2020	09:30	17/06/2020	08:00
I1-I2	10.8 (5 h > 8.0°C)	4.3	16/06/2020	08:15	17/06/2020	06:00
J1-J2	12.8 (11 h > 8.0°C)	14.6	16/06/2020	14:50	17/06/2020	07:40
K	9.8 (4 h > 8.0°C)	12.1	17/06/2020	07:30	17/06/2020	08:30
L	13 (9 h > 8.0°C)	11.5	16/06/2020	12:55	17/06/2020	07:30

No problem was encountered during the transport or at receipt for four laboratories: A, B, C and G.

For eight laboratories (D, E, F, H, I, J, K and L), the temperature during the transport and at receipt was above 8.0°C (acceptable limit according to the AFNOR rules) for the duration indicated in Table 22.

A growth simulation of an *E. coli* strain was calculated with Sym'Previus⁵ using the temperatures registered during transport.

The following results were obtained (See Table 23).

³ R : Reference method

⁴ A : Alternative method

⁵ <http://symprevius.eu/fr/>

Table 23 - Growth simulation of the strain calculated with Sym'Previus

Lab	Growth rate (h^{-1}) for temperature above 8.0°C	CFU/25g at receipt
D	0.0392	1.5 [1.4; 1.6]
E	0.183	194 [67.3; 737.8]
F	0.0688	4.3 [3.0; 7.0]
H1 - H2	0.0359	1.7 [1.5; 2.0]
I1 - I2	0.0341	1.5 [1.4; 1.6]
J1 - J2	0.0420	2.3 [1.9; 2.9]
K	0.0392	1.4 [1.3; 1.5]
L	0.0602	2.2 [1.9; 2.7]

The simulation concluded that a very slight growth occurred during transport for Labs D, H, I and K ($\mu < 0.04 \text{ h}^{-1}$).

For Labs E, F, J and L, the growth rate varies from 0.042 to 0.18 h^{-1} . The contamination level at receipt was respectively estimated to 2.2 to 194 CFU/25 g for labs J and E while the inoculation level was at 1.3 CFU/25 g initially.

Based on this data, it is proposed to keep only the data from collaborators D, H1, H2, I1, I2 and K for interpretation for which no evolution of the contamination level was observed.

3.2.4 Results analysis

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

3.2.4.1 Expert laboratory results

The results obtained by the expert laboratory are given in Table 24.

Table 24 – Results obtained by the expert Lab.

Level	Reference method	Alternative method
L0	0/8	0/8
L1	7/8	8/8
L2	8/8	8/8

All the spiked samples gave positive results using the alternative method. For the reference method, one sample spiked at the low level gave negative PCR and confirmation results.

3.2.4.2 Results observed by the collaborative laboratories

> Aerobic mesophilic flora enumeration

The results are provided in Table 25.

Table 25 - Aerobic mesophilic flora enumeration

Collaborators	Mesophilic flora enumeration (CFU/g)
A	45000
B	1500
C	20000
D	2900
E	20000000
F	50000
G1	550
G2	550
H1	5500
H2	6000
I1	190000
I2	99000
J1	19000
J2	3800
K	11000
L	1400

Depending on the collaborators results, the enumeration level varied from 5.5×10^2 CFU/g to 2.0×10^7 CFU/g. Note that Lab A specified that it left the sample at room temperature for a while before analysis.

The labs for which the temperature during transport was above the limit did not show an aerobic mesophilic flora enumeration higher than the other labs except Lab E (2.0×10^7 CFU/g).

> ***Shiga-toxin producing E. coli detection***

Sixteen collaborators participated in the study. All the collaborators performed the analysis on Tuesday 16th June 2020 or Wednesday 17th June 2020 except Lab E. This lab carried on the analyses for the reference method on Wednesday 17th June 2020 and on Thursday 18th June 2020 for the alternative method.

Labs F and J incubated the enrichment broth from the alternative method for 9 h instead of 8 h.

The results obtained are provided in Table 26 (reference method) and Table 27 (alternative method).

**Table 26 - Positive results (before and after confirmation)
by the reference 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	6	6	6	8	8	8
B	0	7	0	5	7	5	8	8	8
C	6	0	0	8	8	8	8	8	8
D	1	0	0	6	7	6	8	8	8
E	2	5	1	5	8	5	8	8	8
F	0	0	0	5	6	5	7	8	7
G1	4	0	0	8	8	8	8	8	8
G2	3	0	0	6	5	5	8	8	8
H1	4	0	0	7	7	7	8	8	8
H2	0	1	0	7	6	6	8	8	8
I1	4	1	0	7	7	7	8	8	8
I2	0	0	0	6	7	6	8	8	8
J1	0	0	0	6	6	6	8	8	8
J2	1	1	0	6	7	6	8	8	8
K	0	0	0	8	8	8	8	8	8
L	1	0	0	8	8	8	8	8	8
Total	P ₀ = 26	C ₀ = 15	CP ₀ = 1	P ₁ = 104	C ₁ = 111	CP ₁ = 102	P ₂ = 127	C ₂ = 128	CP ₂ = 127

**Table 27 - 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	7	7	7	8	8	8
B	0	0	0	8	8	8	8	8	8
C	0	0	0	8	8	8	8	8	8
D	0	0	0	6	6	6	8	8	8
E	0	0	0	6	6	6	8	8	8
F	0	0	0	7	7	7	8	8	8
G1	0	0	0	8	8	8	8	8	8
G2	0	0	0	7	7	7	8	8	8
H1	0	0	0	6	6	6	8	8	8
H2	0	0	0	7	7	7	8	8	8
I1	0	0	0	8	8	8	8	8	8
I2	0	0	0	8	8	8	8	8	8
J1	0	0	0	8	8	8	8	8	8
J2	0	0	0	8	8	8	8	8	8
K	0	0	0	8	8	8	8	8	8
L	0	0	0	7	7	7	8	8	8
Total	P ₀ = 0	C ₀ = 0	CP ₀ = 0	P ₁ = 117	C ₁ = 117	CP ₁ = 117	P ₂ = 128	C ₂ = 128	CP ₂ = 128

The data from four Labs (E, F, J and L) were not kept for interpretation as the growth simulation of the *Escherichia coli* strain with Sym'Previus⁶ concluded to a significant growth of the strain in the matrix.

3.2.4.3 Results of the collaborators retained for interpretation

The results obtained with the 11 collaborators kept for interpretation are presented in Table 28 (reference method) and Table 29 (alternative method).

⁶ <http://symprevius.eu/fr/>

**Table 28 - Positive results (before and after confirmation)
by the reference method (Without Labs E, F, J and L)**

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	6	6	6	8	8	8
B	0	7	0	5	7	5	8	8	8
C	6	0	0	8	8	8	8	8	8
D	1	0	0	6	7	6	8	8	8
G1	4	0	0	8	8	8	8	8	8
G2	3	0	0	6	5	5	8	8	8
H1	4	0	0	7	7	7	8	8	8
H2	0	1	0	7	6	6	8	8	8
I1	4	1	0	7	7	7	8	8	8
I2	0	0	0	6	7	6	8	8	8
K	0	0	0	8	8	8	8	8	8
Total	C ₀ = 22	P ₀ = 9	CP ₀ = 0	C ₁ = 74	P ₁ = 76	CP ₁ = 72	C ₂ = 88	P ₂ = 88	CP ₂ = 88

**Table 29 - Positive results (before and after confirmation)
by the alternative method (Without Labs E, F, J and L)**

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	7	7	7	8	8	8
B	0	0	0	8	8	8	8	8	8
C	0	0	0	8	8	8	8	8	8
D	0	0	0	6	6	6	8	8	8
G1	0	0	0	8	8	8	8	8	8
G2	0	0	0	7	7	7	8	8	8
H1	0	0	0	6	6	6	8	8	8
H2	0	0	0	7	7	7	8	8	8
I1	0	0	0	8	8	8	8	8	8
I2	0	0	0	8	8	8	8	8	8
K	0	0	0	8	8	8	8	8	8
Total	C ₀ = 0	P ₀ = 0	CP ₀ = 0	C ₁ = 81	P ₁ = 81	CP ₁ = 81	C ₂ = 88	P ₂ = 88	CP ₂ = 88

> Results observed with the reference method

- **PCR results**

For 22 samples (level L0) and one sample (level L1), positive PCR results were observed while the confirmation step gave negative results. Complexity of the sample preparation for the reference method could lead to cross-contamination. The samples are listed in Table 30.

Table 30 - Samples showing positive PCR results and negative confirmation

Collaborator	Samples	Level
C	C5 - C9 - C10 - C12 - C21 - C24	Level 0
D	D24	Level 0
G1	G10 - G12 - G16 - G21	Level 0
G2	G34 - G46 - G47	Level 0
	G35	Level 1
H1	H2 - H9 - H12 - H16	Level 0
H2	H32	Level 1
I1	I5 - I9 - I10 - I12	Level 0

- **Confirmation results**

It was asked to the collaborators to confirm all the samples for the reference method while this is not required in the ISO 16140-2 or in the AFNOR Technical rules. The PCR results were not available when they carried on the confirmation step as the DNA extracts were sent to ADRIA to perform the PCR tests several days later, the collaborators thus needed to confirm all the enriched samples. These confirmation results on samples giving negative PCR tests, on enrichment broth, are given just for information in the raw data tables.

For nine samples (level 0) and four samples (level 1), the presence of Shiga-toxin producing *E. coli* (STEC) was confirmed in the enrichment broth while the PCR results were negative (See Table 31). Those results are likely linked to a lack of practice of the immuno-separation protocol. This step is a critical step and often leads to cross contaminations.

It was asked to Lab B to perform direct streaking of 10 µL of the enriched sample when the PCR was negative. For all the samples, no typical colony was observed on the plates confirming the fact that the cross contaminations occurred probably during the IMS step.

Table 31 - Samples showing negative PCR results and positive confirmation

Collaborator	Samples confirmed positive by IMS	Level
B	B2 - B9 - B10 - B12 - B16 - B21 - B24	Level 0
	B13 - B22	Level 1
D	D6	Level 1
I1	I24	Level 0
I2	I43	Level 1
H2	H42	Level 0

> **Results observed with the alternative method**

The expected results were observed for the unspiked samples (level L0) for all the collaborators.

Fractional positive results were observed for inoculation level 1. All the samples gave positive results for inoculation level 2.

All the positive PCR results were confirmed by direct streaking onto CCA and CHROMagar STEC.

Lab C obtained positive O26 and O103 PCR results on enrichment broth for samples C20 and C23. Only the presence of *E. coli* belonging to the O26 group was confirmed in the enrichment broth.

3.2.5 Calculation and interpretation

3.2.5.1 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 32).

Table 32 - Percentage specificity

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

N: number of all L0 tests

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

CP₀ = total number of false-positive results obtained with the blank samples

3.2.5.2 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 only for the low inoculation level (L1).

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 33.

Table 33 - Summary of the obtained results with the reference method and the alternative method for Level 1

Level	Response	Reference method positive (R+)	Reference method negative (R-)
1	Alternative method positive (A+)	Positive agreement (A+/R+) PA = 65	Positive deviation (R-/A+) PD = 16
	Alternative method negative (A-)	Negative deviation (A-/R+) ND = 7 (PPND = 0)	Negative agreement (A-/R-) NA = 0 (PPNA = 0)

Based on the data summarized in Table 33, 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 34).

Table 34 - Sensitivity, relative trueness and false positive ratio percentages

		Level 1
Sensitivity for the alternative method:	$SE_{alt} = \frac{(PA+PD)}{(PA+PD+ND)} \times 100\% =$	92.0%
Sensitivity for the reference method:	$SE_{ref} = \frac{(PA+ND)}{(PA+PD+ND)} \times 100\% =$	81.7%
Relative trueness	$RT = \frac{(PA+NA)}{N} \times 100\% =$	73.9%
False positive ratio for the alternative method	$FPR = \frac{FP}{NA} \times 100\% =$	N/A

3.2.5.3 Interpretation of data

The negative deviations and the positive deviations for level 1 are listed in Tables 35 and 36.

The confirmation performed on the enrichment broth for samples in negative agreement were all negative.

Table 35 - Negative deviations for level 1

Lab	Sample N°	Confirmation
A	23	-
D	1 & 18	-
G2	32	-
H1	6 & 11	-
H2	26	-

Table 36 - Positive deviations for Level 1

Lab	Sample N°
A	13 & 20
B	1 & 13 & 22
D	6 & 11
G2	26 & 35 & 43
H1	1
H2	29 & 32
I1	13
I2	26 & 43

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

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

where

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

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

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

where

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

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

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

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 37).

Table 37 - Calculations

	Level 1
N_x	88
$(p+)_\text{ref}$	0.82
$(p+)_\text{alt}$	0.92
$\text{AL} = (\text{ND} - \text{PD}) \text{ max}$	7.83
$\text{ND} - \text{PD}$	- 9
Conclusion	$\text{ND} - \text{PD} < \text{AL}$

The ISO 16140-2 (2016) requirements are fulfilled as $(\text{ND} - \text{PD})$ meet the AL.

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

The RLOD was calculated using the EN ISO 16140-2:2016 Excel spreadsheet available at https://standards.iso.org/iso/16140/-5/ed-1/en/RLOD_inter-lab-study_16140-2_AnnexF_ver1_28-06-2017.xls. The results are used only for information (see Table 38).

Table 38 - $\text{LOD}_{50\%}$, $\text{LOD}_{95\%}$ and RLOD

Method	$\text{LOD}_{50\%}$	$\text{LOD}_{95\%}$	RLOD
Reference	0.53	2.28	0.67
Alternative	0.36	1.54	

3.3 Conclusion

> Method comparison study

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

- ☒ Combining the initial and extension studies, three food categories were tested with two test portions for raw meat and vegetables (25 g and 375 g). The protocol of the alternative method shows 59 positive deviations (PD) whatever the incubation time tested and 31 or 28 negative deviations (ND) for the overall categories, depending on the incubation time tested for raw meat and vegetables categories.
The $((ND + PPND) - PD)$ meet the acceptability limits (AL) whatever the categories, test portion, and as well for the three combined categories.

- ☒ The Relative Levels of Detection (RLOD) meet the AL fixed at 2.5 for the unpaired data study whatever the matrix/strain pairs tested and the incubation time applied.

- ☒ 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 enrichment broth for 72 h at $5 \pm 3^\circ\text{C}$.

- ☒ The alternative method allows to screen the negative samples the day of initiating the analyses for the categories tested with a short incubation time.

- ☒ The alternative method fulfils all the EN ISO 16140-2:2016 and AFNOR technical rules (Revision 12).

> Inter-laboratory study

- ☒ Many cross contaminations occurred during the study for the reference method (PCR and confirmations) while the alternative method demonstrated aligned agreement between the PCR analysis and confirmations.
- ☒ The data and interpretations comply with the EN ISO 16140-2:2016 requirements. **The Thermo Scientific™ SureTect™ Escherichia coli O157:H7 and STEC Screening PCR Assay and Thermo Scientific™ SureTect™ Escherichia coli STEC Identification PCR Assay is considered equivalent to the ISO standard.**

Quimper, 29 October 2024

Astrid CARIOU
Manager

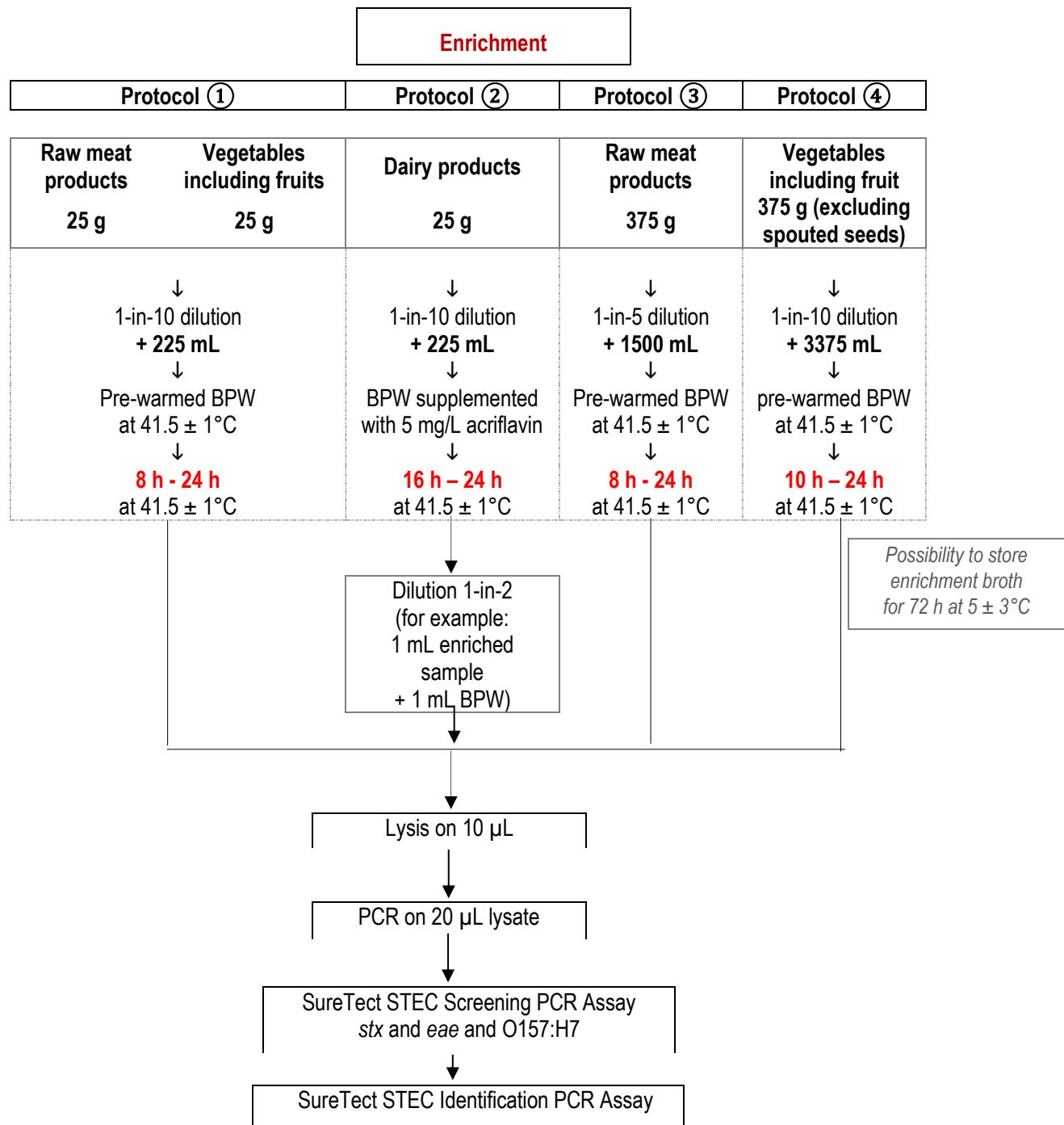
Method performance in food microbiology

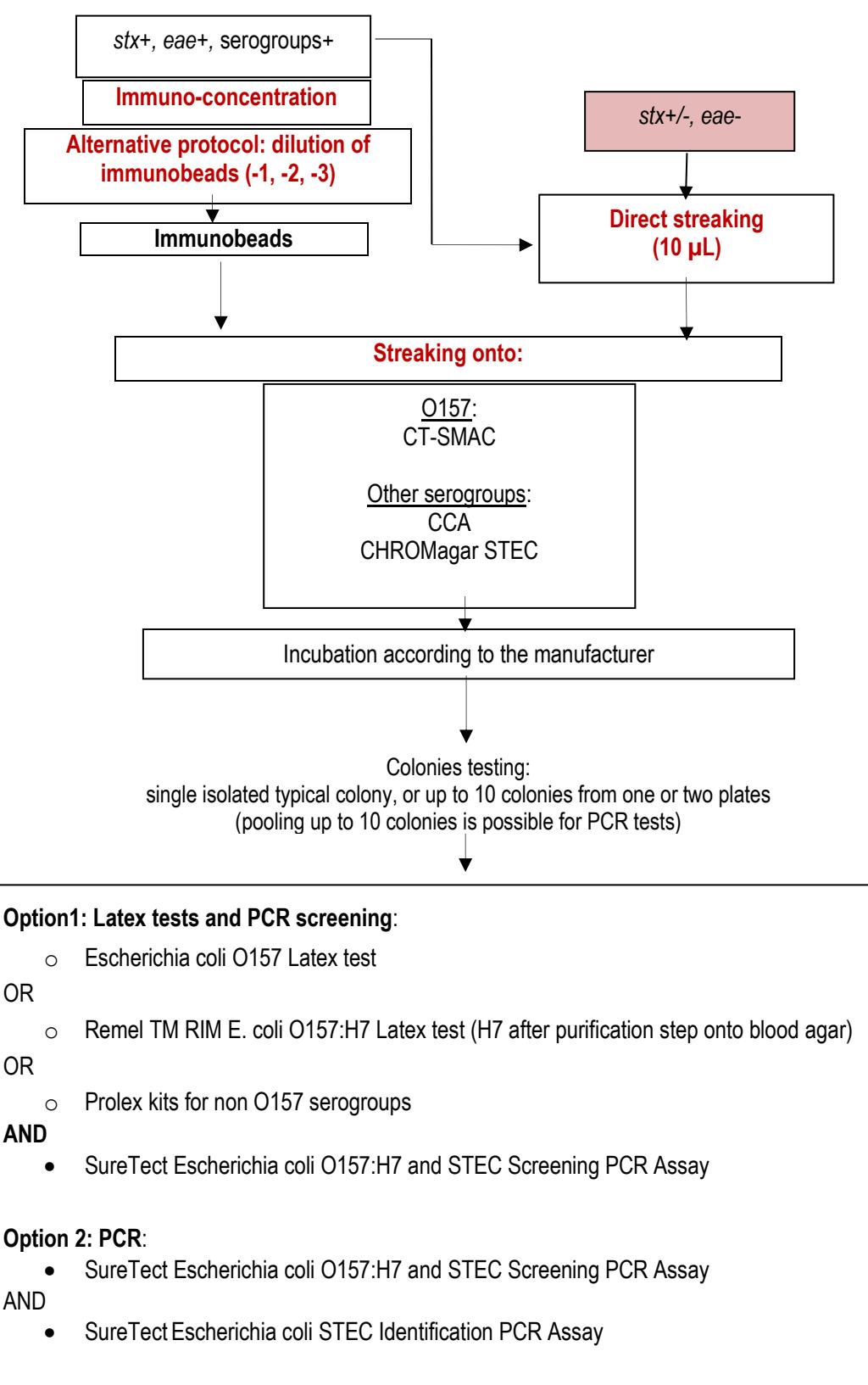
I hereby attest to the validation of the verification of the conformity of the report (opinion and interpretation).

**Appendix 1 – Flow diagram of the alternative method: Thermo Scientific™ SureTect™
Escherichia coli O157:H7 and STEC Screening PCR Assay and Thermo Scientific™
SureTect™ Escherichia coli STEC Identification PCR Assay**

The user guide is available on the following link:

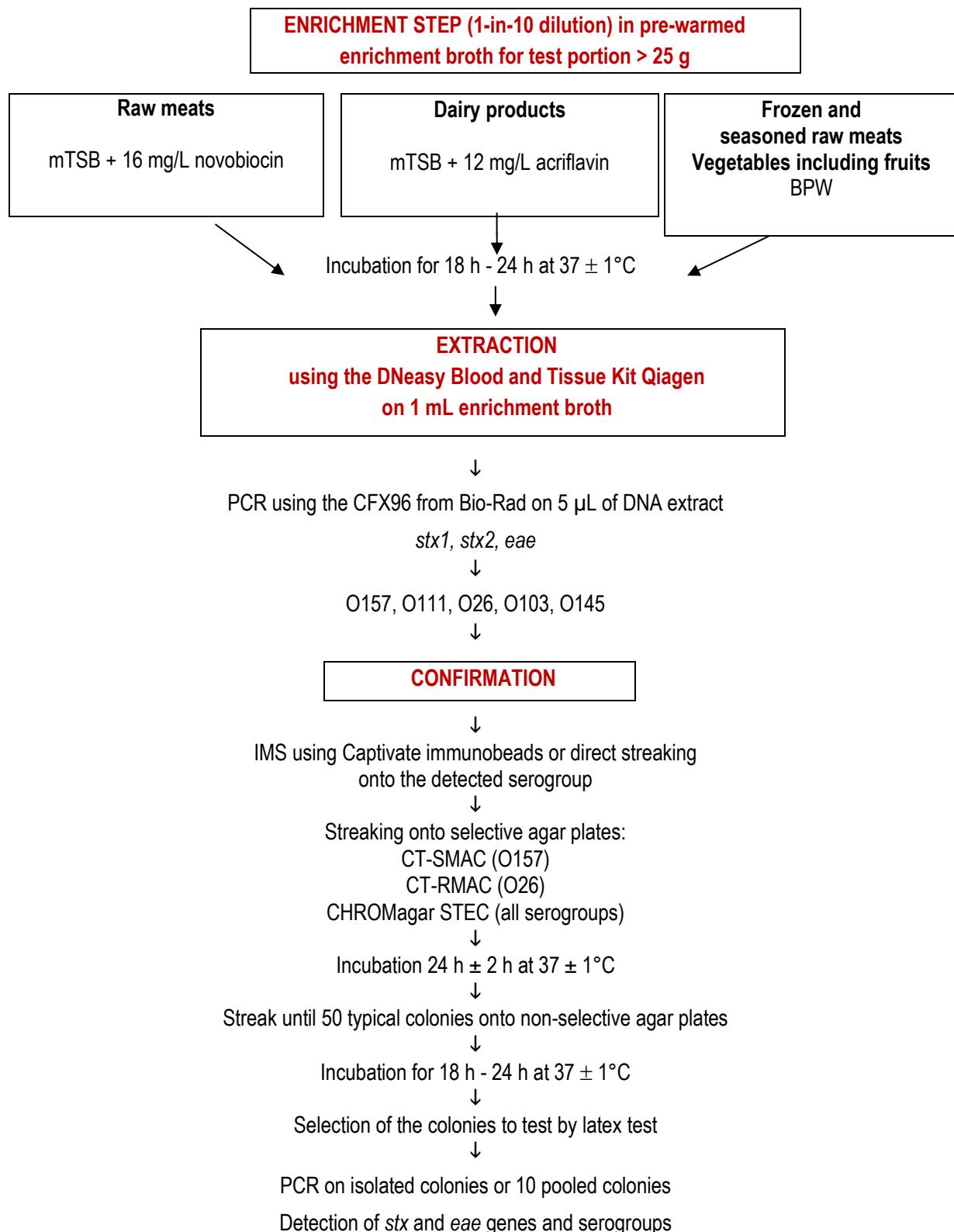
[User Guide for SureTect Escherichia coli O157:H7 and STEC screening PCR Assay and SureTect Escherichia coli STEC identification PCR Assay.](#)





Protocol applied during the validation study for confirmation of negative samples

Appendix 2 – Flow diagram of the reference method:
Internal method from ADRIA Développement, based on ISO/TS 13136 (November 2012)



Appendix 3 – Artificial contamination of samples

SAM: sous atmosphère modifiée

MAP: Under modified atmosphere

Date	Sample N°	Product (French name)	Product	Artificial contaminations (Raw meat products and vegetables including fruits - 25 g test portion)										Global result		Category	Type
				Strain	Virulence genes			Origin	Injury protocol	Injury measurement	Inoculation level CFU/sample		8 h	24 h			
					stx1	stx2	eae				Enumeration	Mean					
2019	3279	Faux filet haché surgelé	Frozen ground beef	<i>E. coli</i> O157:H7 Ad485	+	+	+	Beef	Seeding 2 weeks at -20°C	/	1-3-0-3-1	1.6	+	+	1	c	
2019	3280	Steaks hachés pur boeuf surgelés	Frozen ground beef	<i>E. coli</i> O157:H7 Ad485	+	+	+	Beef	Seeding 2 weeks at -20°C	/	1-3-0-3-1	1.6	-	-	1	c	
2019	3281	Haché pur bœuf 20% MG surgelé	Frozen ground beef	<i>E. coli</i> O145:H28 1502-105	-	+	+	Meat	Seeding 2 weeks at -20°C	/	3-4-4-2-2	3.0	+	+	1	c	
2019	3282	Effeuillés de Charolais surgelés	Frozen beef trim	<i>E. coli</i> O145:H28 1502-105	-	+	+	Meat	Seeding 2 weeks at -20°C	/	3-4-4-2-2	3.0	+	+	1	c	
2019	3283	Effeuillés de Charolais surgelés	Frozen beef trim	<i>E. coli</i> O26:H11 12-62	+	-	+	Meat product	Seeding 2 weeks at -20°C	/	2-1-2-1-1	1.4	+	+	1	c	
2019	3284	Entrecôte surgelée	Frozen beef trim	<i>E. coli</i> O103:H2 56-12	+	-	+	Meat	Seeding 2 weeks at -20°C	/	2-0-0-0-0	0.4	+	+	1	c	
2019	3285	Pavé de rumsteak surgelés	Frozen beef trim	<i>E. coli</i> O111:H8 Ad3012	+	+	+	Unknown	Seeding 2 weeks at -20°C	/	1-1-2-2-2	1.6	+	+	1	c	
2019	3584	Faux filet à griller	Beef trim	<i>E. coli</i> O157:H7 803	-	+	+	Meat product	Seeding 48h 3°C±2°C	/	3-3-3-4-0	2.6	+	+	1	a	
2019	3585	Rumsteak à griller	Beef trim	<i>E. coli</i> O145:H28 1867-177	-	+	+	Meat	Seeding 48h 3°C±2°C	/	1-2-3-6-3	3.0	+	+	1	a	
2019	3586	Biftecks	Beef trim	<i>E. coli</i> O26:H11 1377-1382073	-	+	+	Meat	Seeding 48h 3°C±2°C	/	1-1-1-2-4	1.8	+	+	1	a	
2019	3587	Onglet de bœuf	Beef trim	<i>E. coli</i> O103:H2 72-11	+	-	+	Meat	Seeding 48h 3°C±2°C	/	3-4-3-2-2	2.8	+	+	1	a	
2019	3588	Steak à griller	Beef trim	<i>E. coli</i> O111 Ad3042	+	+	+	Unknown	Seeding 48h 3°C±2°C	/	2-3-4-5-0	2.8	+	+	1	a	
2019	3589	Steak haché 15% MG	Ground beef	<i>E. coli</i> O157:H7 803	-	+	+	Meat product	Seeding 48h 3°C±2°C	/	3-3-3-4-0	2.6	+	+	1	a	
2019	3590	Viande hachée fraîche	Ground beef	<i>E. coli</i> O145:H28 1867-177	-	+	+	Meat	Seeding 48h 3°C±2°C	/	1-2-3-6-3	3.0	-	-	1	a	
2019	7709	Côtes de porcs marinées surgelées	Frozen marinated pork meat	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 2 weeks at -20°C	/	3-6-3-5-4	4.2	+	+	1	c	
2019	7710	Côtes de porcs surgelées	Frozen pork meat	<i>E. coli</i> O157:H7 803	-	+	+	Meat product	Seeding 2 weeks at -20°C	/	1-4-3-4-0	2.4	+	+	1	c	
2019	7711	Agneau surgelé	Frozen lamb meat	<i>E. coli</i> O145 Ad2310	+	+	+	Unknown	Seeding 2 weeks at -20°C	/	6-2-6-5-0	3.8	+	+	1	c	
2019	7712	Sauté de veau surgelé	Frozen veal meat	<i>E. coli</i> O157:H7 803	-	+	+	Meat product	Seeding 2 weeks at -20°C	/	1-4-3-4-0	2.4	+	+	1	c	
2019	7713	Haché de veau surgelé	Frozen ground veal meat	<i>E. coli</i> O111 Ad3037	+	-	+	Unknown	Seeding 2 weeks at -20°C	/	2-2-7-0-1	2.4	+	+	1	c	
2019	7788	Côte d'agneau à griller	Lamb meat	<i>E. coli</i> O145 092-4	-	+	+	Meat product	Seeding 48h 3°C±2°C	/	5-6-6-2-1	4.0	-	-	1	a	
2019	7789	Côte d'agneau à griller	Lamb meat	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h 3°C±2°C	/	1-3-4-2-3	2.6	-	-	1	a	
2019	7790	Tranches d'agneau à l'ail	Marinated lamb meat	<i>E. coli</i> O157 769	-	+	+	Beef	Seeding 48h 3°C±2°C	/	1-7-4-4-4	4.0	+	+	1	b	
2019	7791	Côte de porc mexicain	Seasoned pork meat	<i>E. coli</i> O26:H11 12-62	+	-	+	Meat product	Seeding 48h 3°C±2°C	/	5-3-0-1-4	2.6	+	+	1	b	
2019	7792	Pavé de veau à l'échalotte	Seasoned veal meat	<i>E. coli</i> O145 092-4	-	+	+	Meat product	Seeding 48h 3°C±2°C	/	5-6-6-2-1	4.0	+	+	1	b	
2019	7793	Côte de veau à griller	Veal meat	<i>E. coli</i> O145 092-4	-	+	+	Meat product	Seeding 48h 3°C±2°C	/	5-6-6-2-1	4.0	+	+	1	a	
2019	7794	Côte de porc	Pork meat	<i>E. coli</i> O157 769	-	+	+	Beef	Seeding 48h 3°C±2°C	/	1-7-4-4-4	4.0	+	+	1	a	
2019	8143	Côtes de porcs à la mexicaine	Seasoned pork meat	<i>E. coli</i> O145:H28 1331-100	-	+	+	Meat product	Seeding 48h 3°C±2°C	/	3-1-1-0-1	1.2	+	+	1	b	
2019	8144	Côtes de porcs	Raw pork meat	<i>E. coli</i> O145:H28 1331-100	-	+	+	Meat product	Seeding 48h 3°C±2°C	/	3-1-1-0-1	1.2	+	+	1	a	
2019	8145	Côtes de porcs	Raw pork meat	<i>E. coli</i> O145:H28 2305-1	-	+	+	Meat	Seeding 48h 3°C±2°C	/	3-3-5-1-1	2.6	-	-	1	a	
2020	269	Viande d'agneau (gigot)	Lamb meat	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 48h 3±2°C	/	1-2-0-6-4	2.6	+	+	1	a	
2020	540	Pavés de rumsteck aux 3 poivres	Seasoned beef meat	<i>E. coli</i> O26 14-53	+	-	+	Meat product	Seeding 48h 3±2°C	/	2-1-0-2-2	1.4	-	-	1	b	
2020	541	Pavés de rumsteck aux 3 poivres	Seasoned beef meat	<i>E. coli</i> O111 Ad511	+	+	+	Clinic	Seeding 48h 3±2°C	/	1-2-2-0-0	1.0	+	+	1	b	
2020	542	Bœuf mariné	Marinated beef meat	<i>E. coli</i> O145:H28 1331-100	-	+	+	Meat product	Seeding 48h 3±2°C	/	0-2-1-2-3	1.6	+	+	1	b	
2020	543	Bœuf mariné andaloux	Marinated beef meat	<i>E. coli</i> O145:H28 1331-100	-	+	+	Meat product	Seeding 48h 3±2°C	/	0-2-1-2-3	1.6	+	+	1	b	
2020	544	Bœuf mariné provençal	Marinated beef meat	<i>E. coli</i> O157 Ad488	+	+	+	Ground beef	Seeding 48h 3±2°C	/	4-1-0-2-3	2.0	+	+	1	b	
2020	545	Bœuf mariné mexicain	Marinated beef meat	<i>E. coli</i> O157 Ad488	+	+	+	Ground beef	Seeding 48h 3±2°C	/	4-1-0-2-3	2.0	+	+	1	b	
2020	546	Porc mariné mexicain	Marinated beef meat	<i>E. coli</i> O26 14-53	+	-	+	Meat product	Seeding 48h 3±2°C	/	2-1-0-2-2	1.4	-	-	1	b	
2020	547	Porc mariné mexicain	Marinated beef meat	<i>E. coli</i> O111 Ad511	+	+	+	Clinic	Seeding 48h 3±2°C	/	1-2-2-0-0	1.0	+	+	1	b	
2019	4691	Jeunes pousses (alfalfa, lentilles, poireaux)	Sprouts (alfalfa, lentils, leeks)	<i>E. coli</i> O157:H7 Ad558	-	+	+	Wastewater	Seeding 48h 3±2°C	/	4-8-4-8-2	5.2	+	+	3	a	
2019	4692	Endives	Endives	<i>E. coli</i> O157:H7 Ad558	-	+	+	Wastewater	Seeding 48h 3±2°C	/	2-4-2-4-1	2.6	+	+	3	a	
2019	4693	Jeunes pousses (alfalfa, radis, fenouil)	Sprouts (alfalfa, radish, fennel)	<i>E. coli</i> O145 Ad983	-	+	+	Clinic	Seeding 48h 3±2°C	/	10-0-6-6-4	5.2	+	+	3	a	

Date	Sample N°	Product (French name)	Product	Artificial contaminations (Raw meat products and vegetables including fruits - 25 g test portion)										Global result		Category	Type
				Strain	Virulence genes			Origin	Injury protocol	Injury measurement	Inoculation level CFU/sample		8 h	24 h			
					stx1	stx2	eae				Enumeration	Mean					
2019	4694	Poireaux	Leeks	<i>E. coli</i> O145 Ad983	-	+	+	Clinic	Seeding 48h 3±2°C	/	5-0-3-3-2	2.6	+	+	3	a	
2019	4695	Jeunes pousses (alfalfa)	Sprouts (alfalfa)	<i>E. coli</i> O26 Ad980	-	+	+	Clinic	Seeding 48h 3±2°C	/	10-8-6-6	7.2	+	+	3	a	
2019	4696	Chou	Cabbage	<i>E. coli</i> O26 Ad980	-	+	+	Clinic	Seeding 48h 3±2°C	/	3-3-3-3-3	3.0	+	+	3	b	
2019	4698	Céleri branche	Celery branch	<i>E. coli</i> O103 Ad982	+	-	+	Clinic	Seeding 48h 3±2°C	/	1-3-2-6-2	2.8	+	+	3	a	
2019	4699	Jeunes pousses (poireaux)	Sprouts (leeks)	<i>E. coli</i> O111:H8 Ad511	+	+	+	Clinic	Seeding 48h 3±2°C	/	10-0-4-4-6	4.8	-	+	3	a	
2019	4700	Salade feuille de chêne	Oak leaf salad	<i>E. coli</i> O111:H8 Ad511	+	+	+	Clinic	Seeding 48h 3±2°C	/	5-0-4-4-6	2.4	+	+	3	a	
2019	5041	Petits pois doux extra fins surgelés	Frozen vegetables (peas)	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 2 weeks at -20°C	/	7-8-8-6-7	7.2	+	+	3	b	
2019	5204	Chou pommé vert	Leafy greens (Green cabbage)	<i>E. coli</i> O157:H7 Ad580	+	+	+	Clinic	Seeding 48h 3±2°C	/	1-4-3-0-3	2.2	+	+	3	a	
2019	5206	Laitue	Leafy greens (Lettuce)	<i>E. coli</i> O26 Ad1777	-	+	+	Clinic	Seeding 48h 3±2°C	/	1-0-2-3-0	1.2	-	-	3	a	
2019	5207	Fines pousses alfalfa radis fenouil	Sprouts (alfalfa, radish, fennel)	<i>E. coli</i> O157:H7 Ad580	+	+	+	Clinic	Seeding 48h 3±2°C	/	3-3-0-4-3	2.6	-	-	3	a	
2019	5208	Fines pousses alfalfa	Sprouts (alfalfa)	<i>E. coli</i> O111:H8- Ad1774	-	+	-	Clinic	Seeding 48h 3±2°C	/	7-6-3-3-2	4.2	-	-	3	a	
2019	5209	Fines pousses alfalfa lentilles poireaux	Sprouts (alfalfa, lentils, leeks)	<i>E. coli</i> O145 Ad2310	+	+	+	Unknown	Seeding 48h 3±2°C	/	5-2-4-5-0	3.2	-	-	3	a	
2019	5210	Gingembre	Root vegetables (ginger)	<i>E. coli</i> O157:H7 Ad580	+	+	+	Clinic	Seeding 48h 3±2°C	/	1-4-3-0-3	2.2	+	+	3	b	
2019	5211	Patates douces	Root vegetables (sweet potatoes)	<i>E. coli</i> O111:H8- Ad1774	-	+	-	Clinic	Seeding 48h 3±2°C	/	4-4-3-3-3	3.4	-	-	3	b	
2019	7704	Courgette en rondelles surgelées	Frozen cut zucchini	<i>E. coli</i> O111 Ad3037	+	-	+	Unknown	Seeding 2 weeks at -20°C	/	2-2-7-0-1	2.4	+	+	3	b	
2019	7705	Petits pois doux surgelés	Frozen peas	<i>E. coli</i> O111 Ad3037	+	-	+	Unknown	Seeding 2 weeks at -20°C	/	2-2-7-0-1	2.4	+	+	3	b	
2019	7706	Mangue en morceaux surgelée	Frozen mango	<i>E. coli</i> O145 Ad2310	+	+	+	Unknown	Seeding 2 weeks at -20°C	/	6-2-6-5-0	3.8	-	-	3	c	
2019	7707	Mélange de fruits exotique surgelés	Frozen exotic fruits	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 2 weeks at -20°C	/	3-6-3-5-4	4.2	-	-	3	c	
2019	7708	Melon en billes surgelées	Frozen cantaloup	<i>E. coli</i> O157 Ad3118	+	+	+	Sprouts	Seeding 2 weeks at -20°C	/	2-2-4-5-2	3.0	+	+	3	c	
2020	206	Fraises surgelées	Frozen strawberry	<i>E. coli</i> O111 Ad3037	+	-	+	Unknown	Seeding 2 weeks at -20°C	/	8-8-6-6-6	6.8	+	+	3	c	
2020	207	Fruits exotiques surgelés	Frozen exotic fruits	<i>E. coli</i> O111 Ad3037	+	-	+	Unknown	Seeding 2 weeks at -20°C	/	8-8-6-6-6	6.8	-	-	3	c	
2020	208	Mangue surgelée	Frozen mango	<i>E. coli</i> O145 Ad2310	+	+	+	Unknown	Seeding 2 weeks at -20°C	/	12-8-5-12-12	9.8	+	+	3	c	
2020	255	Carottes râpées MAP	Grated carrots MAP	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h 3±2°C	/	0-2-2-3-3	2.0	-	-	3	b	
2020	256	Carottes râpées MAP	Grated carrots MAP	<i>E. coli</i> O145 Ad983	-	+	+	Clinic	Seeding 48h 3±2°C	/	2-0-1-4-2	1.8	+	+	3	b	
2020	257	Chou blanc émincés MAP	Sliced cabbage MAP	<i>E. coli</i> O26:H11 Ad1507	+	-	+	Unknown	Seeding 48h 3±2°C	/	1-2-1-1-1	1.2	+	+	3	b	
2020	258	Baby carottes coupées	Cut baby carrots	<i>E. coli</i> O111:H8 Ad3021	+	-	+	Unknown	Seeding 48h 3±2°C	/	3-4-2-2-1	2.4	-	-	3	b	
2020	259	Tomates cerises RTE	Tomatoes RTE	<i>E. coli</i> O145 Ad983	-	+	+	Clinic	Seeding 48h 3±2°C	/	2-0-1-4-2	1.8	+	+	3	b	
2020	260	Radis ronds à croquer	Radish RTE	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 48h 3±2°C	/	1-2-0-6-4	2.6	+	+	3	b	
2020	261	Salade de fruits (ananas, pomme)	Fruit salad	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h 3±2°C	/	0-2-2-3-3	2.0	+	+	3	c	
2020	262	Ananas coupé	Pineapple cut	<i>E. coli</i> O111:H8 Ad3021	+	-	+	Unknown	Seeding 48h 3±2°C	/	3-4-2-2-1	2.4	+	+	3	c	
2020	263	Grenade coupée	Pomegranate cut	<i>E. coli</i> O145 Ad983	-	+	+	Clinic	Seeding 48h 3±2°C	/	2-0-1-4-2	1.8	+	+	3	c	
2020	264	Jus de fruits pomme, framboise	Fruit juice	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h 3±2°C	/	0-2-2-3-3	2.0	+	+	3	c	
2020	265	Jus de fruits pomme, framboise	Fruit juice	<i>E. coli</i> O111:H8 Ad3021	+	-	+	Unknown	Seeding 48h 3±2°C	/	3-4-2-2-1	2.4	+	+	3	c	
2020	266	Jus de fruits pomme, raisin, poire et grenade	Fruit juice	<i>E. coli</i> O145 Ad983	-	+	+	Clinic	Seeding 48h 3±2°C	/	2-0-1-4-2	1.8	+	+	3	c	
2020	267	Jus de mangue, passion	Fruit juice	<i>E. coli</i> O26:H11 Ad1507	+	-	+	Unknown	Seeding 48h 3±2°C	/	1-2-1-1-1	1.2	+	+	3	c	
2020	268	Jus de mangue, passion	Fruit juice	<i>E. coli</i> O103 Ad1772	+	-	+	Clinic	Seeding 48h 3±2°C	/	1-2-0-6-4	2.6	+	+	3	c	
2020	349	Choux blancs émincés MAP	Sliced cabbage MAP	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h 3±2°C	/	2-5-2-2-4	3.0	+	+	3	b	
2020	350	Crudités mélangées (chou blanc, carotte, céleri) MAP	Cut vegetables MAP	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h 3±2°C	/	2-5-2-2-4	3.0	+	+	3	b	
2020	351	Carottes râpées MAP	Grated carrots MAP	<i>E. coli</i> O111:H8 Ad3021	+	-	+	Unknown	Seeding 48h 3±2°C	/	0-3-3-0-5	2.2	+	+	3	b	
2020	352	Jeunes pousses douces de laitue	Mix of baby leaves	<i>E. coli</i> O111:H8 Ad3021	+	-	+	Unknown	Seeding 48h 3±2°C	/	0-3-3-0-5	2.2	+	+	3	a	
2020	353	Jeunes pousses d'épinards	Spinach baby leaves	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h 3±2°C	/	2-5-2-2-4	3.0	+	+	3	a	

Date	Sample N°	Product (French name)	Product	Artificial contaminations (Dairy products - 25 g test portion)									Global result 16h	Category	Type			
				Strain	Virulence genes			Origin	Injury protocol	Injury measurement	Inoculation level CFU/sample							
					stx1	stx2	eae				Enumeration	Mean						
2019	7931	Lait cru de vache	Raw cow milk	<i>E. coli</i> O26 Ad3056	+	+	+	Raw milk cheese	Seeding-48h 3± 2°C	/	3-1-3-3-3	2.6	+	2	a			
2019	7932	Lait cru de vache	Raw cow milk	<i>E. coli</i> O103 Ad3051	+	-	+	Dairy product	Seeding-48h 3± 2°C	/	1-1-2-4-1	1.8	+	2	a			
2019	7933	Lait cru de vache	Raw cow milk	<i>E. coli</i> O111 Ad3042	+	+	+	Raw milk cheese	Seeding-48h 3± 2°C	/	1-4-2-0-1	1.6	-	2	a			
2019	7934	Lait cru de vache	Raw cow milk	<i>E. coli</i> O157:H7 Ad3038	-	+	+	Rotten milk	Seeding-48h 3± 2°C	/	7-0-2-3-3	3.0	+	2	a			
2019	7935	Camembert au lait pasteurisé	Pasteurised cow milk cheese	<i>E. coli</i> O26 Ad3056	+	+	+	Raw milk cheese	Seeding-48h 3± 2°C	/	3-1-3-3-3	2.6	+	2	c			
2019	7936	Camembert au lait pasteurisé	Pasteurised cow milk cheese	<i>E. coli</i> O145 Ad3040	+	-	+	Cheese	Seeding-48h 3± 2°C	/	5-7-6-5-2	4.8	+	2	c			
2019	7937	Lait demi-écrémé pasteurisé	Pasteurised semi-skimmed milk	<i>E. coli</i> O103 Ad3051	+	-	+	Dairy product	Seeding-48h 3± 2°C	/	1-1-2-4-1	1.8	+	2	c			
2019	7938	Lait demi-écrémé pasteurisé	Pasteurised semi-skimmed milk	<i>E. coli</i> O157:H7 Ad3038	-	+	+	Rotten milk	Seeding-48h 3± 2°C	/	7-0-2-3-3	3.0	+	2	c			
2019	8035	Reblochon au lait cru	Raw cow milk cheese	<i>E. coli</i> O157 Ad2843	-	+	+	Raw milk	Seeding-48h 3± 2°C	/	1-0-0-2-0	0.6	-	2	b			
2019	8036	Reblochon au lait cru	Raw cow milk cheese	<i>E. coli</i> O111 Ad3041	+	-	+	Raw milk cheese	Seeding-48h 3± 2°C	/	2-1-1-2-1	1.4	+	2	b			
2019	8037	Neuf chatel au lait cru de vache	Raw cow milk cheese	<i>E. coli</i> O157 Ad2843	-	+	+	Raw milk	Seeding-48h 3± 2°C	/	1-0-0-2-0	0.6	+	2	b			
2019	8038	Roquefort au lait cru de brebis	Raw ewe milk cheese	<i>E. coli</i> O103:H2 Ad3100	+	-	+	Goat milk	Seeding-48h 3± 2°C	/	0-2-1-0-3	1.2	-	2	b			
2019	8039	Roquefort au lait cru de brebis	Raw ewe milk cheese	<i>E. coli</i> O145 Ad3020	-	+	+	Goat milk	Seeding-48h 3± 2°C	/	5-0-4-1-2	2.4	+	2	b			
2019	8040	Selles sur Cher au lait cru de chèvre	Raw goat milk cheese	<i>E. coli</i> O103:H2 Ad3100	+	-	+	Goat milk	Seeding-48h 3± 2°C	/	0-2-1-0-3	1.2	-	2	b			
2019	8041	Selles sur Cher au lait cru de chèvre	Raw goat milk cheese	<i>E. coli</i> O145 Ad3020	-	+	+	Goat milk	Seeding-48h 3± 2°C	/	5-0-4-1-2	2.4	+	2	b			
2019	8042	Lait cru de vache	Raw cow milk	<i>E. coli</i> O111 Ad3041	+	-	+	Raw milk cheese	Seeding-48h 3± 2°C	/	2-1-1-2-1	1.4	+	2	a			
2019	8043	Lait cru de vache	Raw cow milk	<i>E. coli</i> O157 Ad2843	-	+	+	Raw milk	Seeding-48h 3± 2°C	/	1-0-0-2-0	0.6	+	2	a			
2019	8044	Lait cru de vache	Raw cow milk	<i>E. coli</i> O111 Ad3041	+	-	+	Raw milk cheese	Seeding-48h 3± 2°C	/	2-1-1-2-1	1.4	-	2	a			
2019	8045	Lait cru de vache	Raw cow milk	<i>E. coli</i> O157 Ad2843	-	+	+	Raw milk	Seeding-48h 3± 2°C	/	1-0-0-2-0	0.6	+	2	a			
2019	8046	Fromage de chèvre au lait pasteurisé	Pasteurised goat milk cheese	<i>E. coli</i> O103:H2 Ad3100	+	-	+	Goat milk	Seeding-48h 3± 2°C	/	0-2-1-0-3	1.2	+	2	c			
2019	8047	Fromage de chèvre au lait pasteurisé	Pasteurised goat milk cheese	<i>E. coli</i> O145 Ad3020	-	+	+	Goat milk	Seeding-48h 3± 2°C	/	5-0-4-1-2	2.4	+	2	c			
2019	8048	Fromage de brebis au lait pasteurisé	Pasteurised ewe milk cheese	<i>E. coli</i> O103:H2 Ad3100	+	-	+	Goat milk	Seeding-48h 3± 2°C	/	0-2-1-0-3	1.2	+	2	c			
2019	8146	Camembert au lait pasteurisé	Pasteurised cow milk cheese	<i>E. coli</i> O103 Ad2977	+	-	+	Raw milk	Seeding-48h 3± 2°C	/	4-12-4-3-3	5.2	+	2	c			
2019	8147	Fromage au lait de chèvre pasteurisé	Pasteurised ewe milk cheese	<i>E. coli</i> O26 Ad3034	+	-	+	Raw goat milk	Seeding-48h 3± 2°C	/	3-2-0-1-2	1.6	+	2	c			
2019	8148	Lait demi-écrémé pasteurisé	Pasteurised cow milk	<i>E. coli</i> O111 Ad3053	+	-	+	Raw milk cheese	Seeding-48h 3± 2°C	/	0-1-0-3-2	1.2	+	2	c			
2019	8388	Lait cru de brebis	Raw ewe milk	<i>E. coli</i> O103 Ad2839	+	-	+	Ewe raw milk	Seeding-48h 3± 2°C	/	4-3-7-2-3	3.8	+	2	a			
2019	8389	Lait cru de brebis	Raw ewe milk	<i>E. coli</i> O26 Ad3012	+	-	+	Goat raw milk cheese	Seeding-48h 3± 2°C	/	1-0-3-1-1	1.2	+	2	a			
2019	8390	Lait cru de vache	Raw cow milk	<i>E. coli</i> O103:H2 1144	+	-	+	Dairy product	Seeding-48h 3± 2°C	/	1-3-3-2-0	1.8	+	2	a			
2019	8391	Lait cru de vache	Raw cow milk	<i>E. coli</i> O103:H2 1144	+	-	+	Dairy product	Seeding-48h 3± 2°C	/	1-3-3-2-0	1.8	+	2	a			
2019	8392	Lait cru de vache	Raw cow milk	<i>E. coli</i> O26 Ad3047	+	+	+	Raw milk cheese	Seeding-48h 3± 2°C	/	2-2-2-4-4	2.8	+	2	a			
2019	8393	Lait cru de vache	Raw cow milk	<i>E. coli</i> O26 Ad3047	+	+	+	Raw milk cheese	Seeding-48h 3± 2°C	/	2-2-2-4-4	2.8	+	2	a			
2019	8394	Fromage au lait cru de chèvre	Raw goat milk cheese	<i>E. coli</i> O103 Ad2839	+	-	+	Ewe raw milk	Seeding-48h 3± 2°C	/	4-3-7-2-3	3.8	+	2	b			
2019	8395	Fromage au lait cru de chèvre	Raw goat milk cheese	<i>E. coli</i> O26 Ad3012	+	-	+	Goat raw milk cheese	Seeding-48h 3± 2°C	/	1-0-3-1-1	1.2	-	2	b			
2019	8396	Fromage au lait cru de brebis	Raw ewe milk cheese	<i>E. coli</i> O111 577-54	+	+	+	Dairy product	Seeding-48h 3± 2°C	/	0-2-2-2-1	1.4	-	2	b			
2019	8397	Fromage au lait cru de vache	Raw cow milk cheese	<i>E. coli</i> O103:H2 1144	+	-	+	Dairy product	Seeding-48h 3± 2°C	/	1-3-3-2-0	1.8	-	2	b			
2019	8398	Fromage au lait cru de vache	Raw cow milk cheese	<i>E. coli</i> O26 Ad3047	+	+	+	Raw milk cheese	Seeding-48h 3± 2°C	/	2-2-2-4-4	2.8	-	2	b			
2020	181	Brie de Meaux au lait cru de vache	Raw cow milk cheese	<i>E. coli</i> O26 Ad2827	+	-	+	Raw milk	Seeding-48h 3± 2°C	/	3-5-2-2-8	4.0	+	2	b			
2020	182	Camembert au lait cru de vache	Raw cow milk cheese	<i>E. coli</i> O26 Ad2827	+	-	+	Raw milk	Seeding-48h 3± 2°C	/	3-5-2-2-8	4.0	-	2	b			
2020	183	Munster au lait cru de vache	Raw cow milk cheese	<i>E. coli</i> O157:H7 Ad3101	-	+	+	Raw milk cheese	Seeding-48h 3± 2°C	/	4-14-14-7-7	9.2	+	2	b			

Date	Sample N°	Product (French name)	Product	Artificial contaminations (Raw meat products - 375 g test portion)									Global result		Category	Type		
				Strain	Virulence genes			Origin	Injury protocol	Injury measurement	Inoculation level CFU/sample		8h	24h				
					stx1	stx2	eae				Enumeration	Mean						
2020	3440	Escalope de jambon de porc crue	Raw pork trim	<i>E. coli</i> O145:H28 2305-1	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	2-1-3-2-1	1.8	+	-	1	a		
2020	3441	Rouelle de porc	Raw pork trim	<i>E. coli</i> O157:H7 52-33 N°34	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	4-4-4-2-0	2.8	-	-	1	a		
2020	3442	Bœuf basse côte à griller	Raw beef trim	<i>E. coli</i> O157:H7 52-33 N°34	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	4-4-4-2-0	2.8	-	-	1	a		
2020	3443	Sauté de porc nature	Raw pork trim	<i>E. coli</i> O26:H11 12-62	+	-	+	Meat product	Seeding 48 h 3°C ± 2°C	/	2-2-4-1-2	2.2	-	-	1	a		
2020	3444	Filet de porc au curry	Seasoned pork meat (curry)	<i>E. coli</i> O103 56-12	+	-	+	Meat product	Seeding 48 h 3°C ± 2°C	/	4-2-4-4-1	3.0	+	+	1	a		
2020	3445	Bavette d'aloyau	Raw beef trim	<i>E. coli</i> O145:H28 1502-105	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	0-2-2-0-2	1.2	+	+	1	a		
2020	3958	Viande de boeuf (pièce à fondue)	Raw beef trim	<i>E. coli</i> O157:H7 Ad222	-	+	+	Ground beef	Seeding 48 h 3°C ± 2°C	/	3-6-63-7	5.0	+	+	1	a		
2020	3959	Steak haché pur bœuf 15%MG	Raw chilled beef	<i>E. coli</i> O103:H2 V92-362	+	-	+	Meat product	Seeding 48 h 3°C ± 2°C	/	4-1-0-2-2	1.8	-	-	1	a		
2020	3960	Côtes de veau à griller	Raw veal trim	<i>E. coli</i> O103:H2 V92-362	+	-	+	Meat product	Seeding 48 h 3°C ± 2°C	/	4-1-0-2-2	1.8	+	+	1	a		
2020	3961	Haché de veau	Raw chilled veal	<i>E. coli</i> O26:H11 14-53	+	-	+	Meat product	Seeding 48 h 3°C ± 2°C	/	1-0-1-0-	0.6	-	-	1	a		
2020	3962	Epaule d'agneau	Raw lamb trim	<i>E. coli</i> O145:H28 2305-1	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	5-3-4-9-4	4.2	+	+	1	a		
2020	4338	Epaule d'agneau désossée	Raw lamb trim	<i>E. coli</i> O103:H2 262-03-18-1	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	2-2-0-2-5	2.2	+	+	1	a		
2020	4339	Epaule d'agneau	Raw lamb trim	<i>E. coli</i> O26:H11 1377-135 lot 3	+	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	1-4-0-5-2	2.4	+	+	1	a		
2020	4340	Entrecôte	Raw beef trim	<i>E. coli</i> O157:H7 670T	+	+	+	Ground beef	Seeding 48 h 3°C ± 2°C	/	4-1-2-1-6	2.8	+	+	1	a		
2020	4341	Steak de bœuf	Raw ground beef	<i>E. coli</i> O111 Ad3037	+	-	+	Unknown	Seeding 48 h 3°C ± 2°C	/	0-1-0-0-2	0.6	+	+	1	a		
2020	3446	Brochettes de porc mariné Tex Mex	Seasoned pork meat	<i>E. coli</i> O145:H28 2305-1	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	2-1-3-2-1	1.8	+	+	1	b		
2020	3447	Brochettes de boeuf marinées barbecue	Seasoned beef meat	<i>E. coli</i> O157:H7 52-33 N°34	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	4-4-4-2-0	2.8	-	-	1	b		
2020	3448	Haché de bœuf bolognaise	Seasoned ground beef	<i>E. coli</i> O145:H28 1502-105	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	0-2-2-0-2	1.2	+	+	1	b		
2020	3449	Brochettes de bœuf haché saveur barbecue	Seasoned beef meat	<i>E. coli</i> O111:H8 Ad511	+	+	+	Clinic	Seeding 48 h 3°C ± 2°C	/	2-3-3-3-1	2.4	+	+	1	b		
2020	3963	Haché bœuf bolognaise	Seasoned chilled beef	<i>E. coli</i> O26:H11 14-53	+	-	+	Meat product	Seeding 48 h 3°C ± 2°C	/	1-0-1-0-	0.6	-	-	1	b		
2020	3964	Brochettes de bœuf aux 3 poivres	Seasoned beef meat	<i>E. coli</i> O157:H7 Ad222	-	+	+	Ground beef	Seeding 48 h 3°C ± 2°C	/	3-6-63-7	5.0	+	+	1	b		
2020	3965	Pavé de veau à l'échalotte	Seasoned veal meat	<i>E. coli</i> O157:H7 Ad222	-	+	+	Ground beef	Seeding 48 h 3°C ± 2°C	/	3-6-63-7	5.0	+	+	1	b		
2020	3966	Farce de veau	Raw ground veal	<i>E. coli</i> O111:H8 Ad3021	+	-	+	Unknown	Seeding 48 h 3°C ± 2°C	/	0-0-0-3-2	1.0	+	+	1	b		
2020	3967	Tranches d'agneau à l'ail	Seasoned lamb meat	<i>E. coli</i> O145:H28 2305-1	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	5-3-4-9-4	4.2	+	+	1	b		
2020	4342	Côtes de porcs marinées	Marinated pork meat	<i>E. coli</i> O26:H11 1377-135 lot 3	+	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	1-4-0-5-2	2.4	+	+	1	b		
2020	4343	Poitrine de porc assaisonnée	Seasoned pork meat	<i>E. coli</i> O157:H7 A1814ID	+	+	+	Ground beef	Seeding 48 h 3°C ± 2°C	/	0-1-2-1-2	1.2	-	-	1	b		
2020	4344	Pavé de veau à l'échalotte	Seasoned veal meat	<i>E. coli</i> O157:H7 670T	+	+	+	Ground beef	Seeding 48 h 3°C ± 2°C	/	4-1-2-1-6	2.8	+	+	1	b		
2020	4345	Veau à la Milanaise	Seasoned veal meat	<i>E. coli</i> O157:H7 A1814ID	+	+	+	Ground beef	Seeding 48 h 3°C ± 2°C	/	0-1-2-1-2	1.2	+	+	1	b		
2020	4346	Pavé d'agneau à la tomate	Seasoned lamb meat	<i>E. coli</i> O103:H2 262-03-18-1	-	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	2-2-0-2-5	2.2	+	+	1	b		
2020	4347	Viande d'agneau au beurre et fines herbes	Marinated lamb meat	<i>E. coli</i> O26:H11 1377-135 lot 3	+	+	+	Meat product	Seeding 48 h 3°C ± 2°C	/	1-4-0-5-2	2.4	+	+	1	b		
2020	3513	Viande hachée de bœuf (15%MG) surgelée	Frozen ground beef meat	<i>E. coli</i> O103 Ad3113	+	-	+	Veal	Seeding 2 weeks at -20°C	/	3-3-2-5-2	3.0	+	+	1	c		
2020	3514	Escalopes de veau panées saumurées surgelées	Frozen brined veal meat	<i>E. coli</i> O26 Ad3109	+	-	+	Veal	Seeding 2 weeks at -20°C	/	5-5-5-4-2	4.2	+	+	1	c		
2020	3515	Saute de porc surgelé	Frozen pork meat	<i>E. coli</i> O111:H8 Ad511	+	+	+	Clinic	Seeding 2 weeks at -20°C	/	5-3-0-3-0	2.2	+	+	1	c		
2020	3516	Steak haché de bœuf à l'oignon surgelé	Frozen seasoned beef meat	<i>E. coli</i> O111:H8 Ad511	+	+	+	Clinic	Seeding 2 weeks at -20°C	/	5-3-0-3-0	2.2	+	+	1	c		
2020	3517	Sauté de veau nature surgelé	Frozen veal meat	<i>E. coli</i> O26 Ad3109	+	-	+	Veal	Seeding 2 weeks at -20°C	/	5-5-5-4-2	4.2	+	+	1	c		
2020	3518	Côtes d'agneau à griller surgelées	Frozen lamb meat	<i>E. coli</i> O103 Ad3113	+	-	+	Veal	Seeding 2 weeks at -20°C	/	3-3-2-5-2	3.0	+	+	1	c		
2020	3519	Viande hachée de bœuf (15%MG) surgelée	Frozen ground beef meat	<i>E. coli</i> O145 Ad2310	+	+	+	Unknown	Seeding 2 weeks at -20°C	/	5-5-6-3-2	4.2	+	+	1	c		
2020	3520	Sauté de porc surgelé	Frozen pork meat	<i>E. coli</i> O145 Ad2310	+	+	+	Unknown	Seeding 2 weeks at -20°C	/	5-5-6-3-2	4.2	+	+	1	c		
2020	3521	Sauté de veau nature surgelé	Frozen veal meat	<i>E. coli</i> O157:H7 Ad685	-	+	+	Environment	Seeding 2 weeks at -20°C	/	2-5-5-4-3	3.8	+	+	1	c		
2020	3522	Côtes d'agneau à griller surgelées	Frozen lamb meat	<i>E. coli</i> O157:H7 Ad685	-	+	+	Environment	Seeding 2 weeks at -20°C	/	2-5-5-4-3	3.8	+	+	1	c		

Date	Sample N°	Product (French name)	Product	Artificial contaminations (Vegetables including fruits - 375 g test portion) (Extension, 2021)								Global result		Category	Type			
				Strain	Virulence genes			Origin	Injury protocol	Inoculation level CFU/sample								
					stx1	stx2	eae			Enumeration	Mean	10h	24h					
2020	3799	Jeunes pousses Mesclun	Baby leaves (Mesclun)	<i>E. coli</i> O157:H7 Ad3118	+	+	+	Sprouted seeds	Seeding 48h at 3±2°C	6-6-6-2-3	4.6	+	+	3	a			
2020	3800	Jeunes pousses Epinards	Baby leaves (Spinach)	<i>E. coli</i> O157:H7 Ad3118	+	+	+	Sprouted seeds	Seeding 48h at 3±2°C	6-6-6-2-3	4.6	+	+	3	a			
2020	3801	Jeunes pousses Roquette	Baby leaves (Arugula)	<i>E. coli</i> O157:H7 Ad3118	+	+	+	Sprouted seeds	Seeding 48h at 3±2°C	6-6-6-2-3	4.6	+	+	3	a			
2020	3802	Jeunes pousses Roquette	Baby leaves (Arugula)	<i>E. coli</i> O111 Ad3037	+	-	+	Unknown	Seeding 48h at 3±2°C	4-2-4-4-5	3.8	+	+	3	a			
2020	3803	Jeunes pousses Mâche	Baby leaves (corn salad)	<i>E. coli</i> O111 Ad3037	+	-	+	Unknown	Seeding 48h at 3±2°C	4-2-4-4-5	3.8	-	-	3	a			
2020	3804	Jeunes pousses Mélange 6 saveurs SAM	Mix of baby leaves	<i>E. coli</i> O111 Ad3037	+	-	+	Unknown	Seeding 48h at 3±2°C	4-2-4-4-5	3.8	+	+	3	a			
2020	3805	Jeunes pousses Roquette	Baby leaves (Arugula)	<i>E. coli</i> O145 Ad2310	+	+	+	Unknown	Seeding 48h at 3±2°C	4-6-3-2-5	4.0	+	+	3	a			
2020	3806	Pousses d'épinards	Baby leaves (Spinach)	<i>E. coli</i> O145 Ad2310	+	+	+	Unknown	Seeding 48h at 3±2°C	4-6-3-2-5	4.0	+	+	3	a			
2020	3807	Mélange de jeunes pousses SAM	Mix of baby leaves	<i>E. coli</i> O103 Ad2309	+	-	+	Unknown	Seeding 48h at 3±2°C	6-2-3-7-6	4.8	+	+	3	a			
2020	3808	Pousses d'épinards	Baby leaves (Spinach)	<i>E. coli</i> O103 Ad2309	+	-	+	Unknown	Seeding 48h at 3±2°C	6-2-3-7-6	4.8	+	+	3	a			
2020	4105	Salade frisée	Curly lettuce	<i>E. coli</i> O26 Ad1777	-	+	+	Clinic	Seeding 48h at 3±2°C	3-4-1-2-5	3.0	+	+	3	a			
2020	4106	Chou	Cabbage	<i>E. coli</i> O26 Ad1777	-	+	+	Clinic	Seeding 48h at 3±2°C	3-4-1-2-5	3.0	+	+	3	a			
2020	4107	Melon charentais coupé	Cut melon	<i>E. coli</i> O157:H7 ET8	-	+	+	Environment	Seeding 48h at 3±2°C	4-6-5-3-3	4.2	-	-	3	c			
2020	4108	Ananas coupé	Cut pineapple	<i>E. coli</i> O145 Ad984	-	+	+	Clinic	Seeding 48h at 3±2°C	1-1-4-2-3	2.2	+	+	3	c			
2020	4109	Pastèque coupée	Cut watermelon	<i>E. coli</i> O145 Ad984	-	+	+	Clinic	Seeding 48h at 3±2°C	1-1-4-2-3	2.2	+	+	3	c			
2020	4111	Salade de fruits frais	Fresh fruit salad	<i>E. coli</i> O103 Ad982	-	+	+	Clinic	Seeding 48h at 3±2°C	4-3-1-7-0	3.0	+	+	3	c			
2020	4112	Baby carottes SAM	Baby carrots MAP	<i>E. coli</i> O157:H7 ET8	-	+	+	Environment	Seeding 48h at 3±2°C	4-6-5-3-3	4.2	-	-	3	b			
2020	4113	Assiette croquantes (mélange salade, carottes)	Mix of vegetables MAP	<i>E. coli</i> O145 Ad984	-	+	+	Clinic	Seeding 48h at 3±2°C	1-1-4-2-3	2.2	+	+	3	b			
2021	1	Chou-fleur en sachet SAM	Cauliflower MAP	<i>E. coli</i> O111 Ad3021	+	-	+	Unknown	Seeding 48h at 3±2°C	2-1-0-0-0	0.6	-	-	3	b			
2021	2	Salade 4 saveurs en sachet SAM	Mix of vegetables MAP	<i>E. coli</i> O26:H11 Ad1507	+	-	+	Unknown	Seeding 48h at 3±2°C	1-3-1-0-2	1.4	+	+	3	b			
2021	3	Mélange baby-carottes et radis en sachet SAM	Baby carrots and radishes MAP	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h at 3±2°C	0-2-2-0-0	0.8	-	-	3	b			
2021	4	Baby carottes en sachet SAM	Baby carrots MAP	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h at 3±2°C	0-2-2-0-0	0.8	-	-	3	b			
2021	5	Assiette croquantes (mélange salade, carottes) SAM	Mix of salads carrots MAP	<i>E. coli</i> O111 Ad3021	+	-	+	Unknown	Seeding 48h at 3±2°C	2-1-0-0-0	0.6	-	-	3	b			
2021	6	Mélanges crudités en sachet SAM	Mix of vegetables MAP	<i>E. coli</i> O157:H7 Ad571	+	+	+	Clinic	Seeding 48h at 3±2°C	3-0-1-0-0	0.8	+	+	3	b			
2021	7	Carottes râpées en sachet SAM	Grated carrots MAP	<i>E. coli</i> O145 Ad984	-	+	+	Clinic	Seeding 48h at 3±2°C	0-1-4-0-1	1.2	+	+	3	b			
2021	8	Jus de fruits frais (pomme et mangue)	Fresh juice (apple, mango)	<i>E. coli</i> O157:H7 Ad571	+	+	+	Clinic	Seeding 48h at 3±2°C	3-0-1-0-0	0.8	-	-	3	c			
2021	9	Jus de fruits frais (ananas et fruits de la passion)	Fresh juice (pineapple, passion fruits)	<i>E. coli</i> O111 Ad3021	+	-	+	Unknown	Seeding 48h at 3±2°C	2-1-0-0-0	0.6	+	+	3	c			
2021	10	Jus de 4 fruits frais	Fresh juice	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h at 3±2°C	0-2-2-0-0	0.8	+	+	3	c			
2021	21	Feuilles de blettes	Corn leaves	<i>E. coli</i> O145 Ad2310	+	+	+	Unknown	Seeding 48h at 3±2°C	1-1-2-0-5	1.8	+	+	3	a			
2021	22	Céleri branche	Celery branch	<i>E. coli</i> O145 Ad2310	+	+	+	Unknown	Seeding 48h at 3±2°C	1-1-2-0-5	1.8	-	-	3	a			
2021	23	Champignons émincés SAM	Slices mushrooms MAP	<i>E. coli</i> O26 Ad1777	-	+	+	Clinic	Seeding 48h at 3±2°C	3-2-1-0-5	2.2	+	+	3	b			
2021	24	Choux rouge émincés SAM	Red cabbage MAP	<i>E. coli</i> O26 Ad1777	-	+	+	Clinic	Seeding 48h at 3±2°C	3-2-1-0-5	2.2	+	+	3	b			
2021	25	Choux blancs émincés SAM	Sliced white cabbage MAP	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h at 3±2°C	1-1-0-0-1	0.6	+	+	3	b			
2021	26	Mélange crudités SAM	Mix of vegetables MAP	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 48h at 3±2°C	1-1-0-0-1	0.6	-	-	3	b			
2021	27	Carottes râpées SAM	Grated carrots MAP	<i>E. coli</i> O111:H8 Ad511	+	+	+	Clinic	Seeding 48h at 3±2°C	0-1-1-3-1	1.2	+	+	3	b			
2021	28	Salade de fruits coupés (ananas, pomme, raisin)	Mix of cut fruits (Pineapple, Apple, Grape)	<i>E. coli</i> O157:H7 Ad574	+	+	+	Clinic	Seeding 48h at 3±2°C	0-4-1-2-5	2.4	+	+	3	c			
2021	29	Salade de fruits coupés (myrtille, ananas, framboise)	Mix of cut fruits (Blueberry, pineapple, raspberry)	<i>E. coli</i> O157:H7 Ad574	+	+	+	Clinic	Seeding 48h at 3±2°C	0-4-1-2-5	2.4	+	+	3	c			
2021	30	Chou rouge	Red cabbage	<i>E. coli</i> O157:H7 Ad574	+	+	+	Clinic	Seeding 48h at 3±2°C	0-4-1-2-5	2.4	-	-	3	a			
2021	33	Abricot surgelé	Frozen apricots	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 15 days at -20°C	3-2-2-2-1	2.0	+	+	3	c			
2021	34	Fruits rouges surgelés	Frozen red fruits	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 15 days at -20°C	3-2-2-2-1	2.0	-	-	3	c			
2021	35	Petits pois surgelés	Frozen peas	<i>E. coli</i> O111 Ad981	+	-	+	Clinic	Seeding 15 days at -20°C	3-2-2-2-1	2.0	+	+	3	b			
2021	36	Pommes en cubes surgelés	Frozen cut apples	<i>E. coli</i> O26 Ad1777	-	+	+	Clinic	Seeding 15 days at -20°C	4-1-3-1-1	2.0	-	-	3	c			

Date	Sample N°	Product (French name)	Product	Artificial contaminations (Vegetables including fruits - 375 g test portion) (Extension, 2021)								Global result		Category	Type			
				Strain	Virulence genes			Origin	Injury protocol	Inoculation level CFU/sample								
					stx1	stx2	eae			Enumeration	Mean	10h	24h					
2021	37	Courges butternut surgelées	Frozen butternut	<i>E. coli</i> O26 Ad1777	-	+	+	Clinic	Seeding 15 days at -20°C	4-1-3-1-1	2.0	+	+	3	b			
2021	38	Figues surgelées	Frozen figs	<i>E. coli</i> O103 Ad982	+	-	+	Clinic	Seeding 15 days at -20°C	3-4-5-3-2	3.4	+	+	3	c			
2021	39	Courgettes surgelées	Frozen zucchini	<i>E. coli</i> O103 Ad982	+	-	+	Clinic	Seeding 15 days at -20°C	3-4-5-3-2	3.4	+	+	3	b			
2021	40	Carottes surgelées	Frozen carrots	<i>E. coli</i> O103 Ad982	+	-	+	Clinic	Seeding 15 days at -20°C	3-4-5-3-2	3.4	+	+	3	b			
2021	256	Jus de fruits frais Tutti frutti	Fresh juice (mix)	<i>E. coli</i> O26 Ad980	-	+	+	Clinic	Seeding 48h at 3±2°C	3-3-4-3-2	3.0	+	+	3	c			
2021	257	Jus de fruits frais (myrtille, cassis, pomme et cranberry)	Fresh juice (blueberry, blackcurrant, apple and cranberry)	<i>E. coli</i> O26 Ad980	-	+	+	Clinic	Seeding 48h at 3±2°C	3-3-4-3-2	3.0	+	+	3	c			
2021	258	Jus de fruits frais (pomme et fruits rouges)	Fresh juice (apple and red fruits)	<i>E. coli</i> O111 Ad3037	+	-	+	Clinic	Seeding 48h at 3±2°C	1-2-2-3-2	2.0	+	+	3	c			

Appendix 4 – Sensitivity study: raw data

Bold typing: artificially inoculated samples

"Target" detection results:

PA:	positive agreement
NA:	negative agreement
ND:	negative deviation
PD:	positive deviation
PPNA:	positive presumptive negative agreement
PPND:	positive presumptive negative deviation

SAM: Sous atmosphère modifiée

MAP: under modified atmosphere

RAW MEATS PRODUCTS (EXCLUDING POULTRY MEAT) 25 g (Initial validation, 2020)

Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*	Alternative method: SureTect STEC												Category	Type					
					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C						BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C												
				Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final result		Agreement 8 h	Confirmation 24 h			Final result all confirmatory tests	Final result		Agreement 24 h					
					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero-group		Final result PCR	Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Global result	Sero-group						
2019	3584	Faux-filet à griller	Beef trim	-	/	O157	O157	/	/	O157	+	O157	PD	O157	O157	/	/	O157	+	O157	PD	1 a	
2019	3585	Rumsteak à griller	Beef trim	-	/	O145/ O103	O145	/	/	O145	+	O145	PD	O145	O145	O145	/	O145	+	O145	PD	1 a	
2019	3586	Biftecks	Beef trim	-	/	O26	O26	/	O26	O26	+	O26	PD	O26	O26	O26	/	O26	+	O26	PD	1 a	
2019	3587	Onglet de bœuf	Beef trim	+	O103	O103	O103	/	/	O103	+	O103	PA	O103	O103	O103	/	O103	+	O103	PA	1 a	
2019	3588	Steak à griller	Beef trim	-	/	O111	O111	/	/	O111	+	O111	PD	O111	O111	O111	/	O111	+	O111	PD	1 a	
2019	3589	Steak haché 15% MG	Ground beef	+	O157	O157	O157	/	/	O157	+	O157	PA	O157	O157	/	/	O157	+	O157	PA	1 a	
2019	3590	Viande hachée fraîche	Ground beef	-	/	-	-	-	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 a	
2019	3591	Faux-filet à griller	Beef trim	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 a	
2019	3592	Rumsteak à griller	Beef trim	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 a	
2019	3593	Biftecks	Beef trim	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 a	
2019	3594	Onglet de bœuf	Beef trim	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 a	
2019	3595	Steak à griller	Beef trim	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 a	
2019	3596	Steak haché 15% MG	Ground beef	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 a	
2019	3597	Viande hachée fraîche	Ground beef	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 a	
2019	7788	Côte d'agneau à griller	Lamb meat	-	/	-	-	-	/	-	-	/	NA	-	-	-	/	-	-	/	NA	1 a	
2019	7789	Côte d'agneau à griller	Lamb meat	-	/	-	-	-	/	-	-	/	NA	-	-	-	/	-	-	/	NA	1 a	
2019	7793	Côte de veau à griller	Veal meat	-	/	O145	O145	O145	/	O145	+	O145	PD	O145	O145	O145	/	O145	+	O145	PD	1 a	
2019	7794	Côte de porc	Pork meat	-	/	O157	O157	O157	/	O157	+	O157	PD	O157	O157	O157	/	O157	+	O157	PD	1 a	
2019	8144	Côtes de porcs	Raw pork meat	-	O157	O145	O145	O145	/	O145	+	O145	PD	O145	O145	O145	/	O145	+	O145	PD	1 a	
2019	8145	Côtes de porcs	Raw pork meat	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 a	
2020	269	Viande d'agneau (gigot)	Lamb meat	-	/	O103	-	O103	/	O103	+	O103	PD	O103	O103	O103	/	O103	+	O103	PD	1 a	
2019	2560	Tartare de boeuf et sa sauce	Seasoned beef meat	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 b	
2019	2561	Pavés de rumsteck à l'échalotte	Seasoned beef meat	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 b	
2019	2562	Viande bovine hachée à la bolognaise	Seasoned beef meat	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 b	
2019	2563	Carpaccio au parmesan	Seasoned beef meat	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	1 b	
2019	7790	Tranches d'agneau à l'ail	Marinated lamb meat	+	O157	O157	O157	O157	O157	/	O157	+	O157	PA	O157	O157	O157	/	O157	+	O157	PA	1 b

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

ADRIA

Summary report (Version 0)

SureTect Escherichia coli O157:H7 and STEC PCR

RAW MEATS PRODUCTS (EXCLUDING POULTRY MEAT) 25 g (Initial validation, 2020)

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					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C						BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C										
				Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final result		Agreement 8 h	Confirmation 24 h			Final result all confirmatory tests	Final result		Agreement 24 h			
					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero-group		Final result PCR	Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Global result	Sero-group				
2019	7791	Côte de porc mexicain	Seasoned pork meat	+	O26	-	-	-	/	-	-	ND	-	-	-	/	-	/	ND	1 b	
2019	7792	Pavé de veau à l'échalotte	Seasoned veal meat	+	O145	-	-	-	/	-	/	ND	-	-	-	/	-	/	ND	1 b	
2019	8143	Côtes de porcs à la mexicaine	Seasoned pork meat	+	O145	O145	O145	O145	/	O145	+	O145	PA	O145	O145	O145	/	O145	+ O145	PA	1 b
2020	50	Palet de porc tomates basilic	Seasoned ground pork	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	/	NA	1 b
2020	51	Saucisses aux oignons	Seasoned ground pork	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	/	NA	1 b
2020	52	Chipolatas aux herbes	Seasoned ground pork	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	/	NA	1 b
2020	53	Saucisses fraîches aux herbes de Provence	Seasoned ground pork	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	/	NA	1 b
2020	54	Saucisses fraîches épiciées	Seasoned ground pork	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	/	NA	1 b
2020	540	Pavés de rumsteck aux 3 poivres	Seasoned beef meat	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	/	NA	1 b
2020	541	Pavés de rumsteck aux 3 poivres	Seasoned beef meat	-	/	O111	O111	O111	/	O111	+	O111	PD	O111	O111	O111	/	O111	+ O111	PD	1 b
2020	542	Bœuf mariné	Marinated beef meat	-	/	O145	-	O145	/	O145	+	O145	PD	O145	-	O145	/	O145	+ O145	PD	1 b
2020	543	Bœuf mariné andalou	Marinated beef meat	-	/	O145	O145	O145	/	O145	+	O145	PD	O145	O145	O145	/	O145	+ O145	PD	1 b
2020	544	Bœuf mariné provençal	Marinated beef meat	+	O157	O157	O157	O157	/	O157	+	O157	PA	O157	O157	O157	/	O157	+ O157	PA	1 b
2020	545	Bœuf mariné mexicain	Marinated beef meat	-	/	O157	O157	O157	/	O157	+	O157	PD	O157	O157	O157	/	O157	+ O157	PD	1 b
2020	546	Porc mariné mexicain	Marinated beef meat	-	/	-	-	/	/	-	-	NA	-	-	/	/	-	-	/	NA	1 b
2020	547	Porc mariné mexicain	Marinated beef meat	-	/	O111	O111	O111	/	O111	+	O111	PD	O111	O111	O111	/	O111	+ O111	PD	1 b
2019	3279	Faux filet haché surgelé	Frozen ground beef	+	O157	-	-	/	/	-	-	/	ND	-	-	/	/	-	/	ND	1 c
2019	3280	Steaks hachés pur boeuf surgelés	Frozen ground beef	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	/	NA	1 c
2019	3281	Haché pur boeuf 20% MG surgelé	Frozen ground beef	-	/	O145	O145	/	/	O145	+	O145	PD	O145	O145	/	/	O145	+ O145	PD	1 c
2019	3282	Effeuillés de Charolais surgelés	Frozen beef trim	-	/	O145	O145	/	/	O145	+	O145	PD	O145	O145	/	/	O145	+ O145	PD	1 c
2019	3283	Effeuillés de Charolais surgelés	Frozen beef trim	+	O26	-	-	/	/	-	-	/	ND	-	-	/	/	-	/	ND	1 c
2019	3284	Entrecôte surgelée	Frozen beef trim	+	O103	O103	-	O103	/	O103	+	O103	PA	O103	O103	O103	/	O103	+ O103	PA	1 c

RAW MEATS PRODUCTS (EXCLUDING POULTRY MEAT) 25 g (Initial validation, 2020)

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					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C							BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C										
				Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final result	Agreement 8 h	Confirmation 24 h			Final result	Agreement 24 h	Final result	Category					
					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted				Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted									
Global result	Sero-group	Global result	Sero-group	Global result	Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Global result	Final result	Agreement 8 h	Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Final result	Final result	Final result	Final result				
2019	3285	Pavé de rumsteak surgelés	Frozen beef trim	+	O111	O111	O111	/	O111	+	O111	PA	O111	O111	O111	/	O111	+	O111	PA	1 c	
2019	3286	Faux filet haché surgelé	Frozen ground beef	-	/	-	-	/	/	-	-	NA	-	-	/	/	-	-	/	NA	1 c	
2019	3287	Steaks hachés pur boeuf surgelés	Frozen ground beef	-	/	-	-	/	/	-	-	NA	-	-	/	/	-	-	/	NA	1 c	
2019	3288	Haché pur bœuf 20% MG surgelé	Frozen ground beef	-	/	-	-	/	/	-	-	NA	-	-	/	/	-	-	/	NA	1 c	
2019	3289	Efeuillés de Charolais surgelés	Frozen beef trim	-	/	-	-	/	/	-	-	NA	-	-	/	/	-	-	/	NA	1 c	
2019	3290	Efeuillés de Charolais surgelés	Frozen beef trim	-	/	-	-	/	/	-	-	NA	-	-	/	/	-	-	/	NA	1 c	
2019	3291	Entrecôte surgelée	Frozen beef trim	-	/	-	-	/	/	-	-	NA	-	-	/	/	-	-	/	NA	1 c	
2019	3292	Pavé de rumsteak surgelés	Frozen beef trim	-	/	-	-	/	/	-	-	NA	-	-	/	/	-	-	/	NA	1 c	
2019	7709	Côtes de porcs marinées surgelées	Frozen marinated pork meat	+	O103	-	-	/	/	-	-	ND	-	-	/	/	-	-	/	ND	1 c	
2019	7710	Côtes de porcs surgelées	Frozen pork meat	+	O157	O157	O157	O157	/	O157	+	O157	PA	O157	O157	O157	/	O157	+	O157	PA	1 c
2019	7711	Agneau surgelé	Frozen lamb meat	+	O145	O145	O145	O145	/	O145	+	O145	PA	O145	O145	O145	/	O145	+	O145	PA	1 c
2019	7712	Sauté de veau surgelé	Frozen veal meat	+	O157	O157/O145	O157	O157	/	O157	+	O157	PA	O157	O157	O157	/	O157	+	O157	PA	1 c
2019	7713	Haché de veau surgelé	Frozen ground veal meat	+	O111	O111	O111	O111	/	O111	+	O111	PA	O111	O111	O111	/	O111	+	O111	PA	1 c
2020	48	Viande de veau sauté à mijoter surgelée	Frozen veal meat	-	/	-	-	/	/	-	-	NA	-	-	/	/	-	-	/	NA	1 c	
2020	49	Filet mignon de porc surgelé	Frozen pork meat	-	/	-	-	/	/	-	-	NA	-	-	/	/	-	-	/	NA	1 c	

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					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C and storage 72 h at 5 ± 3°C							BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C and storage 72 h at 5 ± 3°C											
				Final result PCR	Confirmation 8 h				Final result all confirmatory tests	Final result		Agreement 8 h	Final result PCR	Confirmation 24 h				Final result	Agreement 24 h				
					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests						
				Global result	Sero-group	Global result	Sero-group	Global result	Sero-group	Global result	Sero-group			Global result	Sero-group	Global result	Sero-group						
2019	3584	Faux-filet à griller	Beef trim	-	/	0157	-	-	-	-	/	PPNA	0157	-	-	-	-	-	/	PPNA	1	a	
2019	3585	Rumsteak à griller	Beef trim	-	/	0145	-	0145	/	0145	+	0145	PD	0145	0145	/	/	0145	+	0145	PD	1	a
2019	3586	Biftecks	Beef trim	-	/	026	026	-	/	026	+	026	PD	026	026	/	/	026	+	026	PD	1	a
2019	3587	Onglet de bœuf	Beef trim	+	0103	0103	0103	-	/	0103	+	0103	PA	0103	0103	/	/	0103	+	0103	PA	1	a
2019	3588	Steak à griller	Beef trim	-	/	0111	-	-	-	-	/	PPNA	0111	0111	/	/	0111	+	0111	PD	1	a	
2019	3589	Steak haché 15% MG	Ground beef	+	0157	-/-	-	-	-	-	/	ND	0157	-	-	-	-	-	/	PPND	1	a	
2019	7793	Côte de veau à griller	Veal meat	-	/	0145	0145	/	/	0145	+	0145	PD	0145	0145	/	/	0145	+	0145	PD	1	a
2019	7794	Côte de porc	Pork meat	-	/	0157	0157	/	/	0157	+	0157	PD	0157	0157	/	/	0157	+	0157	PD	1	a
2019	8144	Côtes de porcs	Raw pork meat	-	0157	0145	0145	/	/	0145	+	0145	PD	0145	0145	/	/	0145	+	0145	PD	1	a
2020	269	Viande d'agneau (gigot)	Lamb meat	-	/	0103	-	0103	/	0103	+	0103	PD	0103	-	0103	/	0103	+	0103	PD	1	a
2019	7790	Tranches d'agneau à l'ail	Marinated lamb meat	+	0157	0157	0157	/	/	0157	+	0157	PA	0157	0157	/	/	0157	+	0157	PA	1	b
2019	7791	Côte de porc mexicain	Seasoned pork meat	+	026	-	-	/	/	-	-	/	ND	-	-	/	/	-	-	/	ND	1	b
2019	7792	Pavé de veau à l'échalotte	Seasoned veal meat	+	0145	-	-	/	/	-	-	/	ND	-	-	/	/	-	-	/	ND	1	b
2019	8143	Côtes de porcs à la mexicaine	Seasoned pork meat	+	0145	0145	0145	/	/	0145	+	0145	PA	0145	0145	/	/	0145	+	0145	PA	1	b
2020	541	Pavés de rumsteck aux 3 poivres	Seasoned beef meat	-	/	0111	0111	0111	/	0111	+	0111	PD	0111	0111	0111	/	0111	+	0111	PD	1	b
2020	542	Bœuf mariné	Marinated beef meat	-	/	0145	0145	0145	/	0145	+	0145	PD	0145	0145	0145	/	0145	+	0145	PD	1	b
2020	543	Bœuf mariné andalou	Marinated beef meat	-	/	0145	0145	0145	/	0145	+	0145	PD	0145	0145	0145	/	0145	+	0145	PD	1	b
2020	544	Bœuf mariné provençal	Marinated beef meat	+	0157	0157	0157	0157	/	0157	+	0157	PA	0157	0157	0157	/	0157	+	0157	PA	1	b
2020	545	Bœuf mariné mexicain	Marinated beef meat	-	/	0157	0157	0157	/	0157	+	0157	PD	0157	0157	0157	/	0157	+	0157	PD	1	b
2020	547	Porc mariné mexicain	Marinated beef meat	-	/	0111	0111	0111	/	0111	+	0111	PD	0111	0111	0111	/	0111	+	0111	PD	1	b
2019	3279	Faux filet haché surgelé	Frozen ground beef	+	0157	-	-	/	/	-	-	/	ND	-	-	/	/	-	-	/	ND	1	c

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

ADRIA

67/117

October 29, 2024

Summary report (Version 0)

SureTect Escherichia coli O157:H7 and STEC PCR

RAW MEATS PRODUCTS (EXCLUDING POULTRY MEAT) 25 g (Initial validation, 2020)

Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*	Alternative method: SureTect STEC																Category	Type	
					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C and storage 72 h at 5 ± 3°C								BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C and storage 72 h at 5 ± 3°C										
				Final result PCR	Confirmation 8 h				Final result all confirmatory tests	Final result		Agreement 8 h	Final result PCR	Confirmation 24 h				Final result	Final result	Agreement 24 h			
					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result confirmation direct streaking						Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Global result	Sero-group					
					Global result	Sero-group	Global result	Sero-group		Global result	Sero-group	Global result	Sero-group	Global result	Sero-group	Global result	Sero-group	Global result	Sero-group				
2019	3281	Haché pur bœuf 20% MG surgelé	Frozen ground beef	-	/	0145	-	-	-	+	0145	PD	0145	-	-	0145	0145	+	0145	PD	1	c	
2019	3282	Efeuillés de Charolais surgelés	Frozen beef trim	-	/	0145	-	-	-	-	/	PPNA	0145	0145	/	/	0145	+	0145	PD	1	c	
2019	3283	Efeuillés de Charolais surgelés	Frozen beef trim	+	026	-	-	/	/	-	/	ND	-	-	/	/	-	-	/	ND	1	c	
2019	3284	Entrecôte surgelée	Frozen beef trim	+	0103	0103	0103	/	/	0103	+	0103	PA	0103	026	/	/	026	+	026	PA	1	c
2019	3285	Pavé de rumsteak surgelés	Frozen beef trim	+	0111	0111	0111	/	/	0111	+	0111	PA	0111	0111	/	/	0111	+	0111	PA	1	c
2019	7709	Côtes de porcs marinées surgelées	Frozen marinated pork meat	+	0103	-	-	/	/	-	-	/	ND	-	-	/	/	-	-	/	ND	1	c
2019	7710	Côtes de porcs surgelées	Frozen pork meat	+	0157	0157	0157	/	/	0157	+	0157	PA	0157	0157	/	/	0157	+	0157	PA	1	c
2019	7711	Agneau surgelé	Frozen lamb meat	+	0145	0145	0145	/	/	0145	+	0145	PA	0145	0145	/	/	0145	+	0145	PA	1	c
2019	7712	Sauté de veau surgelé	Frozen veal meat	+	0157	0157	0157	/	/	0157	+	0157	PA	0157	0157	/	/	0157	+	0157	PA	1	c
2019	7713	Haché de veau surgelé	Frozen ground veal meat	+	0111	0111	0111	/	/	0111	+	0111	PA	0111	0111	/	/	0111	+	0111	PA	1	c

RAW MEAT PRODUCTS (excluding poultry) - 375 g (Extension 2020)

Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*	Alternative method: SureTect STEC												Category	Type				
					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C						BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C											
				Result	Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final Result		Final result PCR	Confirmation 24 h			Final result all confirmatory tests	Final Result		Agreement 24 h			
						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero group		Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero group				
2020	3440	Escalope de jambon de porc crue	Raw pork trim	-	/	O26/O103/ O145/O45/ O121	O145	O145		O145	+	O145	PD	-/-	-	O145	O145	-	/	NA	1 a	
2020	3441	Rouelle de porc	Raw pork trim	-	/	-	-			-	-	/	NA	-/-	-	O157	O157	-	/	NA	1 a	
2020	3442	Bœuf basse côte à griller	Raw beef trim	-	/	-	-	-		-	-	/	NA	O157	-	-	-	-	-	/	PPNA	1 a
2020	3443	Sauté de porc nature	Raw pork trim	-	/	-	-	-		-	-	/	NA	-	-	-	-	-	-	/	NA	1 a
2020	3444	Filet de porc au curry	Seasoned pork meat (curry)	+	O103	O103	O103	O103		O103	+	O103	PA	O103	O103	O103	O103	+	O103	PA	1 a	
2020	3445	Bavette d'aloyau	Raw beef trim	-	/	O145	O145	O145		O145	+	O145	PD	O145	O145	O145	O145	+	O145	PD	1 a	
2020	3958	Viande de bœuf (pièce à fondue)	Raw beef trim	-	/	O157	O157	O157		O157	+	O157	PD	O157	O157	O157	O157	+	O157	PD	1 a	
2020	3959	Steak haché pur bœuf 15%MG	Raw chilled beef	-	/	-	-			-	-	/	NA	-	-	-	-	-	-	/	NA	1 a
2020	3960	Côtes de veau à griller	Raw veal trim	-	/	O103/O111/ O26	-	0103		O103	+	O103	PD	O103/O111/ O26/O45/O121	-	0103		O103	+	O103	PD	1 a
2020	3961	Haché de veau	Raw chilled veal	-	/	-/-	-			-	-	/	NA	-/-	-			-	-	/	NA	1 a
2020	3962	Epaule d'agneau	Raw lamb trim	+	O145	-/-	O145			O145	-	/	ND	O145	O145	O145	O145	+	O145	PA	1 a	
2020	4301	Collier d'agneau à mijoter	Raw lamb trim	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 a
2020	4302	Côtes de veau à griller	Raw veal trim	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 a
2020	4303	Viande de porc à mijoter	Raw pork trim	-	/	-	-	-		-	-	/	NA	-	-	-		-	-	/	NA	1 a
2020	4304	Viande bovine pour bourguignon	Raw beef trim	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 a
2020	4305	Blanquette de veau	Raw veal trim	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 a
2020	4306	Viande de porc	Raw pork trim	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 a
2020	4307	Viande bovine à griller	Raw beef trim	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 a
2020	4338	Epaule d'agneau désossée	Raw lamb trim	-	/	O103/O26/ O45/O121	-	-	0103	O103	+	O103	PD	O103/O26/ O45/O121	-	-	0103	O103	+	O103	PD	1 a
2020	4339	Epaule d'agneau	Raw lamb trim	-	/	O26	O26	-		O26	+	O26	PD	O26	O26	O26	O26	+	O26	PD	1 a	
2020	4340	Entrecôte	Raw beef trim	-	/	O157	O157	-		O157	+	O157	PD	O157	O157	O157	O157	+	O157	PD	1 a	

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

RAW MEAT PRODUCTS (excluding poultry) - 375 g (Extension 2020)																						
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*	Alternative method: SureTect STEC																Category	Type
					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C								BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C									
				Result	Final result PCR	Confirmation 8 h				Final result all confirmatory tests	Final Result	Agreement 8 h	Final result PCR	Confirmation 24 h				Final Result	Agreement 24 h			
						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result confirmation IMS diluted					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result confirmation IMS diluted					
2020	4341	Steak de bœuf	Raw ground beef	-	/	O111	O111	O111		O111	+	O111	PD	O111	O111	O111		O111	+	O111	PD	1 a
2020	3446	Brochettes de porc mariné Tex Mex	Seasoned pork meat	+	O145	O145/O45/O121	O145	O145		O145	+	O145	PA	O145/O45/O121	O145	O145		O145	+	O145	PA	1 b
2020	3447	Brochettes de boeuf marinées barbecue	Seasoned beef meat	-	/	-	-				-	/	NA	-	-	-	-	-	-	/	NA	1 b
2020	3448	Haché de bœuf bolognaise	Seasoned ground beef	+	O145	O145	O145	O145		O145	+	O145	PA	O145	O145	-		O145	+	O145	PA	1 b
2020	3449	Brochettes de bœuf haché saveur barbecue	Seasoned beef meat	+	O111	O111	O111	O111		O111	+	O111	PA	O111	O111	O111		O111	+	O111	PA	1 b
2020	3963	Haché bœuf bolognaise	Seasoned chilled beef	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 b
2020	3964	Brochettes de bœuf aux 3 poivres	Seasoned beef meat	+	O157	-	-			-	-	/	ND	-	-			-	-	/	ND	1 b
2020	3965	Pavé de veau à l'échalotte	Seasoned veal meat	+	O157	O157	O157	O157		O157	+	O157	PA	O157/O45/O121	O157	O157		O157	+	O157	PA	1 b
2020	3966	Farce de veau	Raw ground veal	+	O111	-/-/-	-			-	-	/	ND	-	-			-	-	/	ND	1 b
2020	3967	Tranches d'agneau à l'ail	Seasoned lamb meat	+	O145	O103/O145/O45/O121	O145	O145		O145	+	O145	PA	O103/O145/O45/O121	O145	O145		O145	+	/	PA	1 b
2020	4294	Haché de bœuf à la bolognaise	Seasoned ground beef	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 b
2020	4295	Steak haché à l'oignon	Seasoned ground beef	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 b
2020	4296	Farce de veau aux herbes	Seasoned pork meat	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 b
2020	4297	Chair à saucisse	Seasoned pork meat	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 b
2020	4298	Farce de légumes	Seasoned pork meat	-	/	O103/O26	-	-		-	-	/	PPNA	O103/O26/O45/O121	-	-	-	-	-	/	PPNA	1 b
2020	4299	Tranches d'agneau à l'ail	Marinated lamb meat	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 b
2020	4300	Pavé de veau à l'échalotte	Marinated veal meat	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 b
2020	4342	Côtes de porcs marinées	Marinated pork meat	-	/	O26	O26	O26		O26	+	O26	PD	O26	O26	O26		O26	+	O26	PD	1 b
2020	4343	Poitrine de porc assaisonnée	Seasoned pork meat	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1 b
2020	4344	Pavé de veau à l'échalotte	Seasoned veal meat	-	/	O157	O157	-		O157	+	O157	PD	O157	O157	-		O157	+	O157	PD	1 b

RAW MEAT PRODUCTS (excluding poultry) - 375 g (Extension 2020)

Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*	Alternative method: SureTect STEC												Category	Type					
					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C						BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C												
				Result	Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final Result		Final result PCR	Confirmation 24 h			Final result all confirmatory tests	Final Result		Agreement 24 h				
						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero group		Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero group					
2020	4345	Veau à la Milanaise	Seasoned veal meat	+	O157	O157	O157	-		O157	+	O157	PA	O157	O157	-		O157	+	O157	PA	1	b
2020	4346	Pavé d'agneau à la tomate	Seasoned lamb meat	+	O103	-	-			-	-	/	ND	-	-			-	-	/	ND	1	b
2020	4347	Viande d'agneau au beurre et fines herbes	Marinated lamb meat	+	O26	-	-			-	-	/	ND	-	-			-	-	/	ND	1	b
2020	3513	Viande hachée de bœuf (15%MG) surgelée	Frozen ground beef meat	+	O103	O103	O103	O103		O103	+	O103	PA	O103	O103	O103		O103	+	O103	PA	1	c
2020	3514	Escalopes de veau panées saumurées surgelées	Frozen brined veal meat	-	/	O26	O26	O26		O26	+	O26	PD	O26	O26	O26		O26	+	O26	PD	1	c
2020	3515	Saute de porc surgelé	Frozen pork meat	+	O111	O111	O111	O111		O111	+	O111	PA	O111	O111	O111		O111	+	O111	PA	1	c
2020	3516	Steak haché de bœuf à l'oignon surgelé	Frozen seasoned beef meat	+	O111	O111	O111	O111		O111	+	O111	PA	O111	O111	O111		O111	+	O111	PA	1	c
2020	3517	Sauté de veau nature surgelé	Frozen veal meat	+	O26	O26	O26	O26		O26	+	O26	PA	O26	O26	O26		O26	+	O26	PA	1	c
2020	3518	Côtes d'agneau à griller surgelées	Frozen lamb meat	+	O103	O103	O103	O103		O103	+	O103	PA	O103/O45/O121	O103	O103		O103	+	O103	PA	1	c
2020	3519	Viande hachée de bœuf (15%MG) surgelée	Frozen ground beef meat	+	O145	O145	O145	O145		O145	+	O145	PA	O145	O145	O145		O145	+	O145	PA	1	c
2020	3520	Sauté de porc surgelé	Frozen pork meat	+	O145	O145	O145	O145	-	O145	+	O145	PA	O145	O145	O145		O145	+	O145	PA	1	c
2020	3521	Sauté de veau nature surgelé	Frozen veal meat	+	O157	O157	O157	O157		O157	+	O157	PA	O157	O157	O157		O157	+	O157	PA	1	c
2020	3522	Côtes d'agneau à griller surgelées	Frozen lamb meat	+	O157	O157/O103	O157	O157		O157	+	O157	PA	O157/O103	O157	O157		O157	+	O157	PA	1	c
2020	4165	Escalope haché de veau surgelée	Frozen ground veal meat	-	/	-	-			-	-	/	NA	-	-		-	-	/	NA	1	c	
2020	4166	Effeuillés charolais surgelé	Frozen cut beef meat	-	/	-	-			-	-	/	NA	-	-		-	-	/	NA	1	c	
2020	4167	Saute de veau surgelé	Frozen veal meat	-	/	-	-			-	-	/	NA	-	-		-	-	/	NA	1	c	
2020	4168	Viande bovine pour bourguignon surgelée	Frozen beef meat	-	/	-	-			-	-	/	NA	-	-		-	-	/	NA	1	c	
2020	4169	Viande hachée de bœuf surgelée	Frozen beef meat	-	/	-	-			-	-	/	NA	-	-		-	-	/	NA	1	c	
2020	4170	Sauté de porc surgelé	Frozen pork meat	-	/	-	-			-	-	/	NA	-	-		-	-	/	NA	1	c	
2020	4171	Côte de porc surgelée	Frozen pork meat	-	/	-	-			-	-	/	NA	-	-		-	-	/	NA	1	c	

RAW MEAT PRODUCTS (excluding poultry) - 375 g (Extension 2020)																				
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*	Alternative method: SureTect STEC														Category	Type
					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C						BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C									
				Result	Final result PCR	Confirmation 8 h		Final result all confirmatory tests	Final Result	Agreement 8 h	Final result PCR	Confirmation 24 h		Final result all confirmatory tests	Final Result	Agreement 24 h				
						Final result confirmation direct streaking	Final result confirmation IMS					Final result confirmation direct streaking	Final result confirmation IMS							
				Global result	Sero-group	Global result	Sero-group	Global result	Global result	NA	NA	Global result	Global result	NA	NA	NA	NA	NA		
2020	4172	Côte d'agneau à griller surgelée	Frozen lamb meat	-	/	-	-	-	-	NA	-	-	-	-	-	-	-	NA	1	c
2020	4173	Echines de porc surgelée	Frozen pork meat	-	/	-	-	-	-	NA	-	-	-	-	-	-	-	NA	1	c
2020	4174	Tranches de collier d'agneau surgelées	Frozen lamb meat	-	/	-	-	-	-	NA	-	-	-	-	-	-	-	NA	1	c

RAW MEAT PRODUCTS (excluding poultry) - 375 g (Extension 2020)

Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*	Alternative method: SureTect STEC												Category	Type				
					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C and storage for 72 h at 5 ± 3°C						BPW prewarmed (41.5°C) 24 h at 41.5 ± 1°C and storage for 72 h at 5 ± 3°C											
				Result	Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final Result		Agreement	Final result PCR	Confirmation 24 h + 72 h			Final result all confirmatory tests	Final Result		Agreement		
						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero group			Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero group			
2020	3440	Escalope de jambon de porc crue	Raw pork trim	-	/	O26/O103/ O145	0145	0145		0145	+	0145	PD	O26/O103/ O145	-	0145		0145	+	0145	PD	1 a
2020	3441	Rouelle de porc	Raw pork trim	-	/	O157	-	-	-	-	-	/	PPNA	-/-	-	0157		0157	-	/	NA	1 a
2020	3442	Bœuf basse côte à griller	Raw beef trim	-	/	O157	-	-	-	-	-	/	PPNA	O157	-	-	-	-	-	/	PPNA	1 a
2020	3443	Sauté de porc nature	Raw pork trim	-	/	-	-		-	-	-	/	NA	-	-			-	-	/	NA	1 a
2020	3444	Filet de porc au curry	Seasoned pork meat (curry)	+	0103	O103	-	O103		0103	+	0103	PA	0103	0103	0103		0103	+	0103	PA	1 a
2020	3445	Bavette d'aloïau	Raw beef trim	-	/	O145	0145	0145		0145	+	0145	PD	0145	0145	0145		0145	+	0145	PD	1 a
2020	3958	Viande de bœuf (pièce à fondue)	Raw beef trim	-	/	O157	0157	0157		0157	+	0157	PD	-/-	0157	0157		0157	-	/	NA	1 a
2020	3959	Steak haché pur bœuf 15%MG	Raw chilled beef	-	/	-	-		-	-	-	/	NA	-	-			-	-	/	NA	1 a
2020	3960	Côtes de veau à griller	Raw veal trim	-	/	O103/O111/ O26/O45/ O121	-	O103		0103	+	0103	PD	O111/O26/ O45/O121	-	O103		0103	+	0103	PD	1 a
2020	3961	Haché de veau	Raw chilled veal	-	/	-	-		-	-	-	/	NA	-	-			-	-	/	NA	1 a
2020	3962	Epaule d'agneau	Raw lamb trim	+	0145	O145	0145	0145		0145	+	0145	PA	0145	0145	0145		0145	+	0145	PA	1 a
2020	4301	Collier d'agneau à mijoter	Raw lamb trim	-	/	-	-		-	-	-	/	NA	-	-			-	-	/	NA	1 a
2020	4302	Côtes de veau à griller	Raw veal trim	-	/													-	-	/	NA	1 a
2020	4303	Viande de porc à mijoter	Raw pork trim	-	/	O157/ O45/O121	-	-	-	-	-	/	PPNA	-	-	-		-	-	/	NA	1 a
2020	4338	Epaule d'agneau désossée	Raw lamb trim	-	/	O103/O26	-	-	O103	0103	+	0103	PD	O103/O26/ O45/O121	-	O103	0103	+	0103	PD	1 a	
2020	4339	Epaule d'agneau	Raw lamb trim	-	/	O26	026	026		026	+	026	PD	026	026	026		026	+	026	PD	1 a
2020	4340	Entrecôte	Raw beef trim	-	/	O157	-	O157		0157	+	0157	PD	0157	0157	0157		0157	+	0157	PD	1 a

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

ADRIA

Summary report (Version 0)

SureTect Escherichia coli O157:H7 and STEC PCR

RAW MEAT PRODUCTS (excluding poultry) - 375 g (Extension 2020)

Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*	Alternative method: SureTect STEC												Category	Type				
					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C and storage for 72 h at 5 ± 3°C						BPW prewarmed (41.5°C) 24 h at 41.5 ± 1°C and storage for 72 h at 5 ± 3°C											
				Result	Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final Result		Agreement	Final result PCR	Confirmation 24 h + 72 h			Final result all confirmatory tests	Final Result		Agreement		
						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero group			Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero group			
2020	4341	Steak de bœuf	Raw ground beef	-	/	0111	-	0111		0111	+	0111	PD	0111	0111	0111		0111	+	0111	PD	1 a
2020	3446	Brochettes de porc mariné Tex Mex	Seasoned pork meat	+	0145	0145	-	0145		0145	+	0145	PA	0145	0145	0145		0145	+	0145	PA	1 b
2020	3447	Brochettes de boeuf marinées barbecue	Seasoned beef meat	-	/	-	-		-	-	-		NA	-	-	-		-	/	NA	1 b	
2020	3448	Haché de bœuf bolognaise	Seasoned ground beef	+	0145	0145	0145	0145		0145	+	0145	PA	0145	0145	0145		0145	+	0145	PA	1 b
2020	3449	Brochettes de bœuf haché saveur barbecue	Seasoned beef meat	+	0111	0111	0111	0111		0111	+	0111	PA	0111	0111	0111		0111	+	0111	PA	1 b
2020	3964	Brochettes de bœuf aux 3 poivres	Seasoned beef meat	+	0157	-	-		-	-	-	/	ND	-	-		-	-	/	ND	1 b	
2020	3965	Pavé de veau à l'échalotte	Seasoned veal meat	+	0157	0157/045/ 0121	-	-	-	-	-	/	PPND	0157	0157	0157		0157	+	0157	PA	1 b
2020	3966	Farce de veau	Raw ground veal	+	0111	-	-		-	-	-	/	ND	-	-		-	-	/	ND	1 b	
2020	3967	Tranches d'agneau à l'ail	Seasoned lamb meat	+	0145	0103/0145/ 045/0121	0145	0145		0145	+	0145	PA	0103/0145/ 045/0121	0145	0145		0145	+	0145	PA	1 b
2020	4298	Farce de légumes	Seasoned pork meat	-	/	0103/026	-	-	-	-	-	/	PPNA	0103/026	-	-	-	-	/	PPNA	1 b	
2020	4299	Tranches d'agneau à l'ail	Marinated lamb meat	-	/																1 b	
2020	4300	Pavé de veau à l'échalotte	Marinated veal meat	-	/																1 b	
2020	4342	Côtes de porcs marinées	Marinated pork meat	-	/	026	026	026		026	+	026	PD	026	026	026		026	+	026	PD	1 b
2020	4344	Pavé de veau à l'échalotte	Seasoned veal meat	-	/	0157	0157	0157		0157	+	0157	PD	0157	0157	0157		0157	+	0157	PD	1 b
2020	4345	Veau à la Milanaise	Seasoned veal meat	+	0157	0157	0157	0157		0157	+	0157	PA	0157	0157	0157		0157	+	0157	PA	1 b

RAW MEAT PRODUCTS (excluding poultry) - 375 g (Extension 2020)

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					Result		Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final Result		Agreement	Final result PCR	Confirmation 24 h + 72 h			Final Result	Agreement			
					Global result	Sero-group		Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted		Global result	Sero-group			Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Global result	Sero-group		
2020	4346	Pavé d'agneau à la tomate	Seasoned lamb meat	+	O103	-	-			-	O103	-	/	ND	-	-			-	/	ND	1	b
2020	4347	Viande d'agneau au beurre et fines herbes	Marinated lamb meat	+	O26	-	-			-		-	/	ND	-	-			-	/	ND	1	b
2020	3513	Viande hachée de bœuf (15%MG) surgelée	Frozen ground beef meat	+	O103	O103	O103	O103		O103	+	O103	PA	O103	O103	O103		O103	+	O103	PA	1	c
2020	3514	Escalopes de veau panées saumurées surgelées	Frozen brined veal meat	-	/	O26	O26	O26		O26	+	O26	PD	O26	O26	O26		O26	+	O26	PD	1	c
2020	3515	Sauté de porc surgelé	Frozen pork meat	+	O111	O111	-	O111		O111	+	O111	PA	O111	O111	O111		O111	+	O111	PA	1	c
2020	3516	Steak haché de bœuf à l'oignon surgelé	Frozen seasoned beef meat	+	O111	O111	O111	O111		O111	+	O111	PA	O111	O111	O111		O111	+	O111	PA	1	c
2020	3517	Sauté de veau nature surgelé	Frozen veal meat	+	O26	O26	O26	O26		O26	+	O26	PA	O26	O26	O26		O26	+	O26	PA	1	c
2020	3518	Côtes d'agneau à griller surgelées	Frozen lamb meat	+	O103	O103	O103	O103		O103	+	O103	PA	O103O45/ O121	O103	O103		O103	+	O103	PA	1	c
2020	3519	Viande hachée de bœuf (15%MG) surgelée	Frozen ground beef meat	+	O145	O145	O145	O145		O145	+	O145	PA	O145	O145	O145		O145	+	O145	PA	1	c
2020	3520	Sauté de porc surgelé	Frozen pork meat	+	O145	O145	O145	O145		O145	+	O145	PA	O145	O145	O145		O145	+	O145	PA	1	c
2020	3521	Sauté de veau nature surgelé	Frozen veal meat	+	O157	O157	O157	O157		O157	+	O157	PA	O157	O157	O157		O157	+	O157	PA	1	c
2020	3522	Côtes d'agneau à griller surgelées	Frozen lamb meat	+	O157	O157/O103	O157	O157		O157	+	O157	PA	O157/O103	O157	O157		O157	+	O157	PA	1	c
2020	4167	Sauté de veau surgelé	Frozen veal meat	-	/	-	-			-	-	/	NA	-	-			-	-	/	NA	1	c

RAW MEAT PRODUCTS (excluding poultry) - 375 g (Extension 2020)																				
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					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C and storage for 72 h at 5 ± 3°C							BPW prewarmed (41.5°C) 24 h at 41.5 ± 1°C and storage for 72 h at 5 ± 3°C								
				Result	Confirmation 8 h		Final result PCR	Final result confirmation direct streaking		Final result confirmation IMS		Final result confirmation IMS diluted		Final result all confirmatory tests		Final Result	Confirmation 24 h + 72 h		Final Result	Agreement
					Global result	Sero-group		Global result	Sero-group	Global result	Sero-group	Global result	Sero-group	Global result	Sero-group		Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	
2020	4172	Côte d'agneau à griller surgelée	Frozen lamb meat	-	/	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	1 c
2020	4174	Tranches de collier d'agneau surgelées	Frozen lamb meat	-	/	-	-	-	-	-	-	-	-	-	-	-	-	-	NA	1 c

DAIRY PRODUCTS - 25 g (Initial validation, 2020)																							
Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*		Alternative method: SureTect STEC														Category	Type		
						BPW + acriflavine 16 h at 41.5 ± 1°C							BPW + acriflavine 16 h at 41.5 ± 1°C and storage 72 h at 5 ± 3°C										
				Result		Final result PCR	Confirmation			Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Final result		Agreement	Final result PCR	Confirmation			Final result	Agreement		
				Global result	Serogroup		Final result confirmation direct streaking	Final result confirmation direct streaking	Final result confirmation direct streaking				Global result	Sero-group			Final result confirmation direct streaking	Final result confirmation direct streaking	Final result confirmation direct streaking				
2019	7797	Lait cru de vache	Raw cow milk	-	/	-	-	/	/	-	-	/	NA									2 a	
2019	7802	Lait caillé de chèvre	Raw goat milk	-	/	-	-	/	/	-	-	/	NA	-	-				-	-	/	NA	2 a
2019	7931	Lait cru de vache	Raw cow milk	-	/	026	026	026	/	026	+	026	PD	026	026	/		026	+	026	PD	2 a	
2019	7932	Lait cru de vache	Raw cow milk	-	/	0103	-	-	0111	0111	+	0111	PD	0103	-	-	0111	0111	+	0111	PD	2 a	
2019	7933	Lait cru de vache	Raw cow milk	-	/	-	-	/	/	-	-	/	NA									2 a	
2019	7934	Lait cru de vache	Raw cow milk	+	0157	0157/026	0157	0157	/	0157	+	0157	PA	0157	0157	/		0157	+	0157	PA	2 a	
2019	8042	Lait cru de vache	Raw cow milk	+	0111	-	-	/	/	-	-	/	ND	-	-	/		-	-	/	ND	2 a	
2019	8043	Lait cru de vache	Raw cow milk	-	/	0157	0157	0157	/	0157	+	0157	PD	0157	0157	/		0157	+	0157	PD	2 a	
2019	8044	Lait cru de vache	Raw cow milk	-	/	-	-	/	/	-	-	/	NA									2 a	
2019	8045	Lait cru de vache	Raw cow milk	+	0157	0157	0157	0157	/	0157	+	0157	PA	0157	0157	/		0157	+	0157	PA	2 a	
2019	8073	Lait cru de vache	Raw cow milk	-	/	-	-		/	-	-	/	NA									2 a	
2019	8153	Lait cru de chèvre	Raw goat milk	-	/	-	-	/	/	-	-	/	NA	-	-			-	-	/	NA	2 a	
2019	8388	Lait cru de brebis	Raw ewe milk	+	0103	-	-	/	/	-	-	/	ND	-	-			-	-	/	ND	2 a	
2019	8389	Lait cru de brebis	Raw ewe milk	+	026	026	026	026	/	026	+	026	PA	-	026	/		026	-	/	ND	2 a	
2019	8390	Lait cru de vache	Raw cow milk	-	/	0103	0103	0103	/	0103	+	0103	PD	0103	0103	/		0103	+	0103	PD	2 a	
2019	8391	Lait cru de vache	Raw cow milk	+	0103	0103	0103	0103	/	0103	+	0103	PA	0103	0103	/		0103	+	0103	PA	2 a	
2019	8392	Lait cru de vache	Raw cow milk	+	026	026	026	026	/	026	+	026	PA	026	026	/		026	+	026	PA	2 a	
2019	8393	Lait cru de vache	Raw cow milk	+	026	026	026	026	/	026	+	026	PA	026	026	/		026	+	026	PA	2 a	
2020	184	Lait cru de vache	Raw cow milk	-	/	-	-	/	/	-	-	/	NA									2 a	
2020	185	Lait cru de vache	Raw cow milk	-	/	-	-	/	/	-	-	/	NA									2 a	
2019	7795	Fromage frais de vache	Raw cow raw milk cheese	-	/	-	-	/	/	-	-	/	NA									2 b	
2019	7796	Fromage frais de vache	Raw cow raw milk cheese	-	/	-	-	/	/	-	-	/	NA									2 b	
2019	7798	Fromage au lait cru de brebis	Raw ewe milk cheese	-	/	-	-	/	/	-	-	/	NA									2 b	
2019	7799	Fromage au lait cru de brebis	Raw ewe milk cheese	-	/	-	-	/	/	-	-	/	NA									2 b	
2019	7800	Fromage au lait cru de brebis	Raw ewe milk cheese	-	/	-	-	/	/	-	-	/	NA									2 b	
2019	7801	Fromage au lait cru de chèvre	Raw goat milk cheese	-	/	-	-	/	/	-	-	/	NA									2 b	
2019	7803	Saint Maure de chèvre Bio	Raw goat milk cheese	-	/	-	-	/	/	-	-	/	NA									2 b	
2019	7804	Buches de chèvre cendrées	Raw goat milk cheese	-	/	-	-	/	/	-	-	/	NA									2 b	
2019	7805	Buches de chèvre cendrées	Raw goat milk cheese	-	/	-	-	/	/	-	-	/	NA									2 b	
2019	7806	Buches de chèvre cendrées	Raw goat milk cheese	-	/	-	-	/	/	-	-	/	NA									2 b	

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DAIRY PRODUCTS - 25 g (Initial validation, 2020)																											
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						BPW + acriflavine 16 h at 41.5 ± 1°C						BPW + acriflavine 16 h at 41.5 ± 1°C and storage 72 h at 5 ± 3°C															
				Result		Final result PCR	Confirmation						Final result all confirmatory tests	Final result		Agreement	Final result PCR	Confirmation						Final result	Agreement		
				Global result	Serogroup		Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Global result	Sero-group	Final result confirmation direct streaking		Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests		Global result	Sero-group								
2019	8035	Reblochon au lait cru	Raw cow milk cheese	-	/	-	-	/	/	-	-	/	NA	O103/-/O103	-	-	-	-	-	-	-	-	/	PPNA	2	b	
2019	8036	Reblochon au lait cru	Raw cow milk cheese	-	/	0103	-	0111	/	0111	+	0111	PD	0103	0111	-	-	0111	+	0111	PD	0111	+	0111	PD	2	b
2019	8037	Neufchatel au lait cru de vache	Raw cow milk cheese	-	/	0157	0157	0157	/	0157	+	0157	PD	0157	0157	/	-	0157	+	0157	PD	0157	+	0157	PD	2	b
2019	8038	Roquefort au lait cru de brebis	Raw ewe milk cheese	-	/	-	-	/	/	-	-	/	NA													2	b
2019	8039	Roquefort au lait cru de brebis	Raw ewe milk cheese	-	/	0145	0145	0145	/	0145	+	0145	PD	0145	0145	/	-	0145	+	0145	PD	0145	+	0145	PD	2	b
2019	8040	Selles sur Cher au lait cru de chèvre	Raw goat milk cheese	-	/	-	-	/	/	-	-	/	NA													2	b
2019	8041	Selles sur Cher au lait cru de chèvre	Raw goat milk cheese	-	/	0145	0145	0145	/	0145	+	0145	PD	0145	0145	/	-	0145	+	0145	PD	0145	+	0145	PD	2	b
2019	8069	Fromage à pâte persillée au lait cru de brebis	Raw ewe milk cheese	-	/	-	-	/	/	-	-	/	NA													2	b
2019	8070	Fromage à pâte persillée au lait cru de brebis	Raw ewe milk cheese	-	/	-	-	/	/	-	-	/	NA													2	b
2019	8071	Fromage à pâte persillée au lait cru de brebis	Raw ewe milk cheese	-	/	-	-	/	/	-	-	/	NA													2	b
2019	8072	Fromage affiné au lait cru de vache	Raw cow milk cheese	-	/	0103	-	0103	/	0103	+	0103	PD	-/0103/-	0103	/	-	0103	-	026	026	026	026	026	PA	2	b
2019	8149	Fromage au lait cru de chèvre	Raw goat milk cheese	-	/	-	-	/	/	-	-	/	NA	-	-	-	-	-	-	-	-	-	-	-	NA	2	b
2019	8150	Fromage au lait cru de chèvre	Raw goat milk cheese	-	/	-	-	/	/	-	-	/	NA													2	b
2019	8151	Fromage au lait cru de chèvre	Raw goat milk cheese	-	/	-	-	/	/	-	-	/	NA	-	-	-	-	-	-	-	-	-	-	-	NA	2	b
2019	8152	Fromage au lait cru de vache	Raw cow raw milk cheese	+	026	026	-	026	/	026	+	026	PA	026	-	026		026		026		026	+	026	PA	2	b
2019	8394	Fromage au lait cru de chèvre	Raw goat milk cheese	-	/	0103	0103	0103	/	0103	+	0103	PD	0103	0103	/	-	0103	+	0103	PD	0103	+	0103	PD	2	b
2019	8395	Fromage au lait cru de chèvre	Raw goat milk cheese	-	/	-	-	/	/	-	-	/	NA													2	b
2019	8396	Fromage au lait cru de brebis	Raw ewe milk cheese	-	/	-	-	/	/	-	-	/	NA	-	-	-	-	-	-	-	-	-	-	-	NA	2	b
2019	8397	Fromage au lait cru de vache	Raw cow milk cheese	-	/	-	-	/	/	-	-	/	NA													2	b
2019	8398	Fromage au lait cru de vache	Raw cow milk cheese	-	/	-	-	/	/	-	-	/	NA													2	b
2020	181	Brie de Meaux au lait cru de vache	Raw cow milk cheese	-	/	026	026	026	/	026	+	026	PD	026	026	026		026	+	026	PD	026	+	026	PD	2	b
2020	182	Camembert au lait cru de vache	Raw cow milk cheese	-	/	-	-	/	/	-	-	/	NA													2	b
2020	183	Munster au lait cru de vache	Raw cow milk cheese	+	0157	-	-	/	/	-	-	/	ND	-	-	-	-	-	-	-	-	-	-	-	ND	2	b

DAIRY PRODUCTS - 25 g (Initial validation, 2020)																								
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				Result		Final result PCR	Confirmation			Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Final result		Agreement	Final result PCR	Confirmation			Final result	Agreement		
				Global result	Serogroup		Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted					Global result	Sero-group			Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Global result	Sero-group	
2019	7935	Camembert au lait pasteurisé	Pasteurised cow milk cheese	+	O26	-	-	/	/	-	-	/	ND	-	-	/		-	-	/	ND	2	c	
2019	7936	Camembert au lait pasteurisé	Pasteurised cow milk cheese	+	O145	O145	O145	O145	/	O145	+	O145	PA	O145	O145	/		O145	+	O145	PA	2	c	
2019	7937	Lait demi-écrémé pasteurisé	Pasteurised half-skimmed milk	+	O103	O103	O103	O103	/	O103	+	O103	PA	O103	O103	O103		O103	+	O103	PA	2	c	
2019	7938	Lait demi-écrémé pasteurisé	Pasteurised semi-skimmed milk	+	O157	O157	O157	O157	/	O157	+	O157	PA	O157	O157	O157		O157	+	O157	PA	2	c	
2019	8046	Fromage de chèvre au lait pasteurisé	Pasteurised goat milk cheese	+	O103	-	-	/	/	-	-	/	ND	-	-	/		-	-	/	ND	2	c	
2019	8047	Fromage de chèvre au lait pasteurisé	Pasteurised goat milk cheese	-	/	O145	O145	O145	/	O145	+	O145	PD	O145	O145	/		O145	+	O145	PD	2	c	
2019	8048	Fromage de brebis au lait pasteurisé	Pasteurised ewe milk cheese	+	O103	O103	O103	O103	/	O103	+	O103	PA	O103	O103	/		O103	+	O103	PA	2	c	
2019	8146	Camembert au lait pasteurisé	Pasteurised cow milk cheese	-	/	O103	O103	O103	/	O103	+	O103	PD	O103	O103	/		O103	+	O103	PD	2	c	
2019	8147	Fromage au lait de chèvre pasteurisé	Pasteurised ewe milk cheese	-	/	O26	O26	O26	/	O26	+	O26	PD	O26	O26	/		O26	+	O26	PD	2	c	
2019	8148	Lait demi-écrémé pasteurisé	Pasteurised cow milk	+	O111	-/-	O111	/	/	O111	-	/	ND	-/-	O111			O111	-	/	ND	2	c	
2020	186	Lait entier pasteurisé de vache	Pasteurised cow milk	-	/	-	-	/	/	-	-	/	NA									2	c	
2020	187	Lait demi-écrémé pasteurisé de vache	Pasteurised cow milk	-	/	-	-	/	/	-	-	/	NA									2	c	
2020	188	Lait demi-écrémé pasteurisé de vache	Pasteurised cow milk	-	/	-	-	/	/	-	-	/	NA									2	c	
2020	189	Lait demi-écrémé pasteurisé de vache	Pasteurised cow milk	-	/	-	-	/	/	-	-	/	NA									2	c	
2020	190	Lait entier de chèvre pasteurisé	Pasteurised goat milk	-	/	-	-	/	/	-	-	/	NA									2	c	
2020	191	Lait demi-écrémé de brebis pasteurisé	Pasteurised ewe milk	-	/	-	-	/	/	-	-	/	NA									2	c	
2020	192	Lait de brebis pasteurisé	Pasteurised ewe milk	-	/	-	-	/	/	-	-	/	NA									2	c	
2020	193	Brique de chèvre pasteurisé	Pasteurised goat milk cheese	-	/	-	-	/	/	-	-	/	NA									2	c	
2020	194	Brique de vache pasteurisé	Pasteurised cow milk cheese	-	/	-	-	/	/	-	-	/	NA									2	c	
2020	195	Brique de brebis pasteurisé	Pasteurised ewe milk cheese	-	/	-	-	/	/	-	-	/	NA									2	c	

VEGETABLES INCLUDING FRUITS - 25 g (Initial validation, 2020)

Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136♦	Alternative method: SureTect STEC														Category	Type		
					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C							BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C										
					Result		Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final result	Agreement	Final result PCR 24h	Confirmation 24 h			Final result all confirmatory tests	Final result	Agreement		
					Globa-result	Sero-group		Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted				Global result	Sero-group	Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted				
2019	4691	Jeunes pousses (alfalfa, lentilles, poireaux)	Sprouts (alfalfa, lentils, leeks)	-	/	O157	-	0157	/	O157	+	O157	PD	O157	-	0157	/	O157	+	O157	PD	3 a
2019	4692	Endives	Endives	+	O157	-	-	/	/	-	-	/	ND	-	-	/	/	-	-	/	ND	3 a
2019	4693	Jeunes pousses (alfalfa, radis, fenouil)	Sprouts (alfalfa, radish, fennel)	-	/	O145	-	0145	/	O145	+	O145	PD	O145	-	0145	/	O145	+	O145	PD	3 a
2019	4694	Poireaux	Leeks	+	O145	O145	O145	O145	/	O145	+	O145	PA	O145	O145	O145	/	O145	+	O145	PA	3 a
2019	4695	Jeunes pousses (alfalfa)	Sprouts (alfalfa)	-	/	O26	-	026	/	O26	+	O26	PD	O26	-	-	026	026	+	O26	PD	3 a
2019	4698	Céleri branche	Celery branch	+	O103	O103	O103	O103	/	O103	+	O103	PA	O103	O103	O103	/	O103/O45/O121	+	O103	PA	3 a
2019	4699	Jeunes pousses (poireaux)	Sprouts (leeks)	-	/	-	-	-	0111	0111	-	/	NA	O111	-	0111	/	O111	+	O111	PD	3 a
2019	4700	Salade feuille de chêne	Oak leaf salad	+	O111	-	-	/	/	-	-	/	ND	-	-	/	/	-	-	/	ND	3 a
2019	4701	Jeunes pousses (alfalfa)	Sprouts (alfalfa)	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 a
2019	4702	Jeunes pousses (poireaux)	Sprouts (leeks)	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 a
2019	4703	Céleri branche	Celery branch	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 a
2019	4704	Chou	Cabbage	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 a
2019	5204	Chou pommé vert	Leafy greens (Green cabbage)	+	O157	O157	O157	O157	/	O157	+	O157	PA	O157	O157	O157	/	O157	+	O157	PA	3 a
2019	5206	Laitue	Leafy greens (Lettuce)	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 a
2019	5207	Fines pousses alfalfa radis fenouil	Sprouts (alfalfa, radish, fennel)	-	/	O157	-	-	-	-	-	/	PPNA	O157	-	-	-	-	-	/	PPNA	3 a
2019	5208	Fines pousses alfalfa	Sprouts (alfalfa)	-	/	-	-	/	/	-	-	/	NA	O111	-	-	-	-	-	/	PPNA	3 a
2019	5209	Fines pousses alfalfa lentilles poireaux	Sprouts (alfalfa, lentils, leeks)	-	/	O145	-	-	-	-	-	/	PPNA	O145/O103	-	-	-	-	-	/	PPNA	3 a
2019	5212	Chou vert	Leafy greens (Green cabbage)	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 a
2019	5213	Laitue	Leafy greens (Lettuce)	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 a
2019	5214	Fines pousses alfalfa radis fenouil	Sprouts (alfalfa, radish, fennel)	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 a
2019	5215	Fines pousses alfalfa	Sprouts (alfalfa)	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 a
2020	352	Jeunes pousses douces de laitue	Mix baby leaves	+	O111	-	-	/	/	-	-	/	ND	-	-	-	/	-	-	/	ND	3 a
2020	353	Jeunes pousses d'épinards	Spinach baby leaves	+	O111	-	-	/	/	-	-	/	ND	-	-	-	/	-	-	/	ND	3 a

♦ Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

ADRIA

80/117

October 29, 2024

Summary report (Version 0)

SureTect Escherichia coli O157:H7 and STEC PCR

VEGETABLES INCLUDING FRUITS - 25 g (Initial validation, 2020)

Date	Sample N°	Product (French name)	Product	Reference method: ISO/TS 13136*	Alternative method: SureTect STEC														Category	Type		
					BPW pre-warmed (41.5°C) 8 h at 41.5 ± 1°C							BPW pre-warmed (41.5°C) 24 h at 41.5 ± 1°C										
				Result	Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final result	Agreement	Final result PCR 24h	Confirmation 24 h			Final result all confirmatory tests	Final result	Agreement				
						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted							
				Global result	Sero-group	Global result	Sero-group	Global result	Global result	Global result	Agreement	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Category	Type		
2019	4696	Chou	Cabbage	+	O26	O26	O26	/	O26	+	O26	PA	O26	O26	O26	/	O26	+	O26	PA	3 b	
2019	5041	Petits pois doux extra fins surgelés	Frozen vegetables (peas)	-	/	O103	O103	O103	/	O103	+	O103	PD	O103/ O145/ O45/ O121	O103	/	/	O103	+	O103	PD	3 b
2019	5210	Gingembre	Root vegetables (ginger)	+	O157	O157	O157	O157	/	O157	+	O157	PA	O157	O157	O157	/	O157	+	O157	PA	3 b
2019	5211	Patates douces	Root vegetables (sweet potatoes)	-	O111	-	-	/	/	-	-	O111	NA	-	-	/	/	-	-	O111	NA	3 b
2019	5216	Radis noir	Root vegetables (black radish)	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 b
2019	5217	Patates douces	Root vegetables (sweet potatoes)	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 b
2019	7704	Courgette en rondelles surgelées	Frozen cut zucchini	+	O111	O111	O111	O111	/	O111	+	O111	PA	O111/ O26	O111	O111	/	O111	+	O111	PA	3 b
2019	7705	Petits pois doux surgelés	Frozen peas	+	O111	O111	O111	O111	/	O111	+	O111	PA	O111	O111	O111	/	O111	+	O111	PA	3 b
2020	255	Carottes râpées MAP	Grated carrots MAP	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 b
2020	256	Carottes râpées MAP	Grated carrots MAP	-	/	O145	O145	O145	/	O145	+	O145	PD	O145	O145	O145	/	O145	+	O145	PD	3 b
2020	257	Chou blanc émincés MAP	Sliced cabbage MAP	+	O26	O26	O26	O26	/	O26	+	O26	PA	O26	O26	O26	/	O26	+	O26	PA	3 b
2020	258	Baby carottes coupées	Cut baby carrots	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 b
2020	259	Tomates cerises RTE	Tomatoes RTE	-	/	O145	O145	O145	/	O145	+	O145	PD	O145	O145	O145	/	O145	+	O145	PD	3 b
2020	260	Radis ronds à croquer	Radish RTE	-	/	O103	O103	O103	/	O103	+	O103	PD	O103	O103	O103	/	O103	+	O103	PD	3 b
2020	270	Carottes râpées MAP	Grated carrots MAP	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 b
2020	271	Chou blanc émincés MAP	Sliced cabbage MAP	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 b
2020	272	Tomates cerises RTE	Tomatoes RTE	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 b
2020	349	Choux blancs émincés MAP	Sliced cabbage MAP	+	O111	O111	O111	O111	/	O111	+	O111	PA	O111	O111	O111	/	O111	+	O111	PA	3 b
2020	350	Crudités mélangées (chou blanc, carotte, céleri) MAP	Cut vegetables MAP	-	/	O111	O111	O111	/	O111	+	O111	PD	O111	O111	O111	/	O111	+	O111	PD	3 b
2020	351	Carottes râpées MAP	Grated carrots MAP	+	O111	-	-	/	/	-	-	/	ND	-	-	/	/	-	-	/	ND	3 b
2020	354	Choux blancs émincés MAP	Sliced cabbage MAP	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 b
2020	355	Carottes râpées MAP	Grated carrots MAP	-	/	-	-	/	/	-	-	/	NA	-	-	/	/	-	-	/	NA	3 b

VEGETABLES INCLUDING FRUITS - 25 g (Initial validation, 2020)

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				Result	Final result PCR	Confirmation 8 h			Final result all confirmatory tests	Final result	Agreement	Final result PCR 24h	Confirmation 24 h			Final result all confirmatory tests	Final result	Agreement			
						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted						
				Globa-result	Sero-group	Global result	Sero-group	Global result	Global result	NA	-	-	/	/	-	-	-	/	NA	3 c	
2019	7706	Mangue en morceaux surgelée	Frozen mango	-	/	-	-	-	-	-	/	NA	-	-	/	/	-	-	NA	3 c	
2019	7707	Mélange de fruits exotique surgelés	Frozen exotic fruits	-	/	-	-	-	-	-	/	NA	-	-	/	/	-	-	NA	3 c	
2019	7708	Melon en billes surgelés	Frozen cantaloup	+	O157	-	-	-	-	-	/	ND	-	-	/	/	-	-	ND	3 c	
2020	206	Fraises surgelées	Frozen strawberry	-	/	O111	-	0111	/	O111	+	O111	PD	O111	O111	O111	/	O111	+ O111	PD	3 c
2020	207	Fruits exotiques surgelés	Frozen exotic fruits	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	-	NA	3 c
2020	208	Mangue surgelée	Frozen mango	+	O145	O145	O145	O145	/	O145	+	O145	PA	O145	O145	O145	/	O145	+ O145	PA	3 c
2020	261	Salade de fruits (ananas, pomme)	Fruit salad	-	/	O111	O111	O111	/	O111	+	O111	PD	O111	O111	O111	/		+ O111	PD	3 c
2020	262	Ananas coupé	Pineapple cut	+	O111	O111	O111	O111	/	O111	+	O111	PA	O111	O111	O111	/	O111	+ O111	PA	3 c
2020	263	Grenade coupée	Pomegranate cut	+	O145	-	-	/	/	-	/	ND	-	-	/	/	-	-	-	ND	3 c
2020	264	Jus de fruits pomme, framboise	Fruit juice	+	O111	O111	O111	O111	/	O111	+	O111	PA	O111	O111	O111	/	O111	+ O111	PA	3 c
2020	265	Jus de fruits pomme, framboise	Fruit juice	-	/	O111	O111	O111	/	O111	+	O111	PD	O111	O111	O111	/	O111	+ O111	PD	3 c
2020	266	Jus de fruits pomme, raisin, poire et grenade	Fruit juice	+	O145	O145	O145	O145	/	O145	+	O145	PA	O145	O145	O145	/	O145	+ O145	PA	3 c
2020	267	Jus de mangue, passion	Fruit juice	+	O26	O26	O26	O26	/	O26	+	O26	PA	O26	O26	O26	/	O26	+ O26	PA	3 c
2020	268	Jus de mangue, passion	Fruit juice	+	O103	O103	O103	O103	/	O103	+	O103	PA	O103	O103	O103	/	O103	+ O103	PA	3 c
2020	273	Jus de pomme, framboise	Fruit juice	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	NA	3 c	
2020	274	Jus de pomme, raisin, poire et grenade	Fruit juice	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	NA	3 c	
2020	275	Jus de mangue, passion	Fruit juice	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	NA	3 c	
2020	276	Grenade coupée	Pomegranate cut	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	NA	3 c	
2020	356	Ananas découpé	Cut pineapple	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	NA	3 c	
2020	357	Mangue découpée	Cut mango	-	/	-	-	/	/	-	/	NA	-	-	/	/	-	-	NA	3 c	

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				Result	Final result PCR	Confirmation 8 h				Final result all confirmatory tests		Agreement	Final result PCR 24h	Confirmation 24 h				Final result		Agreement			
						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests 24h						
Global result	Sero group	Global result	Sero group	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Agreement	Final result PCR 24h	Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests 24h	Global result	Global result	Agreement	Category	Type	
2019	4691	Jeunes pousses (alfalfa, lentilles, poireaux)	Sprouts (alfalfa, lentils, leeks)	-	/	O157	-	-	-	-	/	PPNA	O157	O157	-	/	O157	+	O157	PD	3	a	
2019	4692	Endives	Endives	+	O157	-	-	/	/	-	/	ND	-	-	-	/	-	-	/	ND	3	a	
2019	4693	Jeunes pousses (alfalfa, radis, fenouil)	Sprouts (alfalfa, radish, fennel)	-	/	O145	-	-	-	-	/	PPNA	O145	-	-	0145	O145	+	O145	PD	3	a	
2019	4694	Poireaux	Leeks	+	O145	O145	O145	O145	/	O145	+	O145	PA	O145	O145	/	/	O145	+	O145	PA	3	a
2019	4695	Jeunes pousses (alfalfa)	Sprouts (alfalfa)	-	/	-/-	-	O26	/	026	-	/	NA	O26	-	-	-	-	/	PPNA	3	a	
2019	4698	Céleri branche	Celery branch	+	O103	-/-	O26	/	/	026	-	/	ND	O103	O103	/	/	O103	+	O103	PA	3	a
2019	4699	Jeunes pousses (poireaux)	Sprouts (leeks)	-	/	-	/	/	/	-	-	/	NA	O111	-	-	0111	O111	+	O111	PD	3	a
2019	4700	Salade feuille de chêne	Oak leaf salad	+	O111	O103	-	-	-	-	-	/	PPND	-	-	/	/	-	-	/	ND	3	a
2019	5204	Chou pommé vert	Leafy greens (Green cabbage)	+	O157	O157	O157	/	/	0157	+	O157	PA	O157	O157	/	/	O157	+	O157	PA	3	a
2019	5207	Fines pousses alfalfa radis fenouil	Sprouts (alfalfa, radish, fennel)	-	/	O157	-	-	-	-	-	/	PPNA	O157	-	-	-	-	/	PPNA	3	a	
2019	5208	Fines pousses alfalfa	Sprouts (alfalfa)	-	/	-	-	-	-	-	-	/	NA	0111/0111	-	-	-	-	/	PPNA	3	a	
2019	5209	Fines pousses alfalfa lentilles poireaux	Sprouts (alfalfa, lentils, leeks)	-	/	-	O145	-	-	0145	-	/	NA	O145	-	-	-	-	/	PPNA	3	a	
2020	352	Jeunes pousses douces de laitue	Mix of baby leaves	+	O111	-	-	/	/	-	-		ND	-	-	/	/	-	-	/	ND	3	a
2020	353	Jeunes pousses d'épinards	Spinach baby leaves	+	O111	-	-	/	/	-	-		ND	-	-	/	/	-	-	/	ND	3	a
2019	4696	Chou	Cabbage	+	O26	O26	O26	/	/	O26	+	O26	PA	O26	O26	/	/	O26	+	O26	PA	3	b
2019	5041	Petits pois doux extra fins surgelés	Frozen vegetables (peas)	-	/	O103	O103	/	/	O103	+	O103	PD	O103	-	-	-	-	-	/	PPNA	3	b
2019	5210	Gingembre	Root vegetables (ginger)	+	O157	O157	O157	/	/	O157	+	O157	PA	O157	O157	/	/	-	+	O157	PA	3	b
2019	5211	Patates douces	Root vegetables (sweet potatoes)	-	O111	-	-	-	/	-	-	O111	NA	-	-	-	/	-	-	O111	NA	3	b
2019	7704	Courgette en rondelles surgelées	Frozen cut zucchini	+	O111	O111	O111	/	/	O111	+	O111	PA	O111	O111	0111	0111	/	+	O111	PA	3	b

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October 29, 2024

Summary report (Version 0)

SureTect Escherichia coli O157:H7 and STEC PCR

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						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests 24h					
Global result	Sero group	Global result	Sero group	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result		
2019	7705	Petits pois doux surgelés	Frozen peas	+	O111	O111	/	/	O111	+	O111	PA	O111	O111	O111	/	O111	+	O111	PA	3 b	
2020	256	Carottes râpées MAP	Grated carrots MAP	-	/	O145	O145	/	/	O145	+	O145	PD	O145	O145	/	/	O145	+	O145	PD	3 b
2020	257	Chou blanc émincés MAP	Sliced cabbage MAP	+	O26	O26	O26	/	/	O26	+	O26	PA	O26	O26	/	/	O26	+	O26	PA	3 b
2020	259	Tomates cerises RTE	Tomatoes RTE	-	/	O145	O145	/	/	O145	+	O145	PD	O145	O145	/	/	O145	+	O145	PD	3 b
2020	260	Radis ronds à croquer	Radish RTE	-	/	O103	O103	/	/	O103	+	O103	PD	O103	O103	/	/	O103	+	O103	PD	3 b
2020	349	Choux blancs émincés MAP	Sliced cabbage MAP	+	O111	O111	O111	O111	/	O111	+		PA	O111	O111	/	/	O111	+	O111	PA	3 b
2020	350	Crudités mélangées (chou blanc, carotte, céleri) MAP	Cut vegetables MAP	-	/	O111	O111	O111	/	O111	+		PD	O111	O111	/	/	O111	+	O111	PD	3 b
2020	351	Carottes râpées MAP	Grated carrots MAP	+	O111	-	-	/	/	-	-		ND	-	-	/	/	-	-	/	ND	3 b
2019	7708	Melon en billes surgelés	Frozen cantaloup	+	O157	-	-	/	/	-	-	/	ND	-	-	/	/	-	-	/	ND	3 c
2020	206	Fraises surgelées	Frozen strawberry	-	/	O111	O111	/	/	O111	+	O111	PD	O111	O111	O111	/	O111	+	O111	PD	3 c
2020	208	Mangue surgelée	Frozen mango	+	O145	O145	O145	O145	/	O145	+	O145	PA	O145	O145	O145	/	O145	+	O145	PA	3 c
2020	261	Salade de fruits (ananas, pomme)	Fruit salad	-	/	O111	O111	/	/	O111	+	O111	PD	O111	O111	/	/	O111	+	O111	PD	3 c
2020	262	Ananas coupé	Pineapple cut	+	O111	O111	O111	/	/	O111	+	O111	PA	O103/O111	O111	/	/	O111	+	O111	PA	3 c
2020	263	Grenade coupée	Pomegranate cut	+	O145	-	-	/	/	-	-	-	ND	-	-	/	/	-	-	/	ND	3 c
2020	264	Jus de fruits pomme, framboise	Fruit juice	+	O111	O111	O111	/	/	O111	+	O111	PA	O111	O111	/	/	O111	+	O111	PA	3 c
2020	265	Jus de fruits pomme, framboise	Fruit juice	-	/	O103/ O111	O111	/	/	O111	+	O111	PD	O111	O111	/	/	O111	+	O111	PD	3 c
2020	266	Jus de fruits pomme, raisin, poire et grenade	Fruit juice	+	O145	O145	O145	/	/	O145	+	O145	PA	O145	O145	/	/	O145	+	O145	PA	3 c
2020	267	Jus de mangue, passion	Fruit juice	+	O26	O26	O26	/	/	O26	+	O26	PA	O26	O26	/	/	O26	+	O26	PA	3 c
2020	268	Jus de mangue, passion	Fruit juice	+	O103	O103/ O45/ O121	O103	/	/	O103	+	O103	PA	O103	O103	/	/	O103	+	O103	PA	3 c

VEGETABLES INCLUDING FRUITS - 375 g (Excluding sprouted seeds) (Extension 2021)

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					Final result PCR	Confirmation 10 h			Final result all confirmatory tests		Final Result	Final result PCR	Confirmation 24 h			Final Result		Category	Type			
						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted					Final result PCR	Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests 2	Final result PCR				
Global result	Sero-group	Global result	Sero-group	Global result	Global result	Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Final result PCR	Final result confirmation direct streaking	Final result PCR	Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests 2	Final result PCR	Final result confirmation direct streaking	Final result PCR	Category	Type	
2020	3799	Jeunes pousses Mesclun	Baby leaves (Mesclun)	- /	O157/ O103/ O26/ O45/ O121	-	-		O157 (72h)	+	O157	PD	O157/ O103/ O26/ O45/ O121	-	-	O157	O157	+ /	O157	PD	3 a	
2020	3800	Jeunes pousses Epinards	Baby leaves (Spinach)	+ 0157	0157	0157	-		0157	+	O157	PA	0157	0157	-		0157	0157	+ /	0157	PA	3 a
2020	3801	Jeunes pousses Roquette	Baby leaves (Arugula)	+ 0157	0157	0157	-		0157	+	O157	PA	0157	0157	-		0157	0157	+ /	0157	PA	3 a
2020	3802	Jeunes pousses Roquette	Baby leaves (Arugula)	+ 0111	0111	0111	0111		0111	+	O111	PA	0111	0111	0111		0111	0111	+ /	0111	PA	3 a
2020	3803	Jeunes pousses Mâche	Baby leaves (corn salad)	- /	-	-	-		-	- /	NA	-	-			-	-	- /	NA	3 a		
2020	3804	Jeunes pousses Mélange 6 saveurs SAM	Mix of baby leaves	- /	0111	-	0111		0111	+	O111	PD	0111	-	0111		0111	0111	+ /	0111	PD	3 a
2020	3805	Jeunes pousses Roquette	Baby leaves (Arugula)	+ 0145	0111/ O145	0145	0145		0145	+	O145	PA	0111/ O145	0145	0145		0145	0145	+ /	0145	PA	3 a
2020	3806	Pousses d'épinards	Baby leaves (Spinach)	+ 0145	0103/ O145	-	0145		0145	+	O145	PA	0103/ O145	-	0145		0145	0145	+ /	0145	PA	3 a
2020	3807	Mélange de jeunes pousses SAM	Mix of baby leaves	+ 0103	0103/ O145	0103	0103		0103	+	O103	PA	0103/ O145/ O45/ O121	0103	0103		0103	0103	+ /	0103	PA	3 a
2020	3808	Pousses d'épinards	Baby leaves (Spinach)	- /	0103	0103	0103		0103	+	O103	PD	0103	0103	0103		0103	0103	+ /	0103	PD	3 a
2020	4105	Salade frisée	Curly lettuce	- /	0157/026	-	-		026 (72h)	+	O26	PD	026	-	-		026 (72h)	026	+ /	026	PD	3 a
2020	4106	Chou	Cabbage	+ 026	-	-			-	- /	ND	-	-			-	-	- /	ND	3 a		
2020	4248	Endives	Endives	- /	-	-			-	- /	NA	-	-			-	-	- /	NA	3 a		
2020	4249	Chou chinois	Chinese cabbage	- /	-	-			-	- /	NA	-	-			-	-	- /	NA	3 a		
2020	4251	Laitue	Lettuce	- /	0103/ O45/ O121	-	-		-	- /	PPNA	0103/ O45/ O121	-	-	-	-	-	- /	PPNA	3 a		
2020	4252	Scarole	Salad (Escarole)	- /	0103/ O145/ O45/ O121	-	-		-	- /	PPNA	0103/ O145	-	-	-	-	-	- /	PPNA	3 a		
2020	4253	Batavia	Salad (Batavia)	- /	-	-			-	- /	NA	-	-			-	-	- /	NA	3 a		

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

VEGETABLES INCLUDING FRUITS - 375 g (Excluding sprouted seeds) (Extension 2021)

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					Final result PCR	Confirmation 10 h			Final result all confirmatory tests		Final Result	Final result PCR	Confirmation 24 h			Final Result		Category	Type			
						Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests 2	Final result					
2021	21	Feuilles de blettes	Corn leaves	+	0145	0145	0145	0145		0145	+	0145	PA	0145	0145	0145		0145	+	0145	PA	3 a
2021	22	Céleri branche	Celery branch	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 a
2021	30	Chou rouge	Red cabbage	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 a
2020	4112	Baby carottes SAM	Baby carrots MAP	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2020	4113	Assiette croquantes (mélange salade, carottes)	Mix of vegetables MAP	-	/	0145	0145	0145		0145	+	0145	PD	0145	0145	0145		0145	+	0145	PD	3 b
2020	4241	Mélange de légumes wok (carottes, choux, poireaux)	Mix of wok vegetables	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2020	4242	Carottes Nantaises SAM	Carrots MAP	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2020	4243	Courge bio SAM	Squash MAP	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2020	4244	Potimarron en cubes SAM	Pumpkin cubes MAP	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2020	4245	Chou blanc frais émincés SAM	Fresh sliced white cabbage MAP	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2020	4246	Carottes en rondelles surgelées	Frozen cut carrots	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2020	4247	Courgettes en rondelles surgelées	Frozen sliced zucchini	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2020	4250	Chou blanc frais émincé SAM	Fresh sliced white cabbage MAP	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2021	1	Chou-fleur en sachet SAM	Cauliflower MAP	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2021	2	Salade 4 saveurs en sachet SAM	Mix of vegetables MAP	+	026	-	-			-	-	/	ND	-	-		-	-	-	/	ND	3 b
2021	3	Mélange baby-carottes et radis en sachet SAM	Baby carrots and radishes MAP	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2021	4	Baby carottes en sachet SAM	Baby carrots MAP	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b
2021	5	Assiette croquantes (mélange salade, carottes) SAM	Mix of salads carrots MAP	-	/	-	-			-	-	/	NA	-	-		-	-	-	/	NA	3 b

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Global result	Sero-group	Global result	Sero-group	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Global result	Agreement	Category	Type		
2021	6	Mélanges crudités en sachet SAM	Mix vegetables MAP	+	O157	-	-			-	-	/	ND	-	-	-	-	-	ND	3	b	
2021	7	Carottes râpées en sachet SAM	Grated carrots MAP	-	/	0145	0145	0145		0145	+	0145	PD	0145	0145	0145	0145	+	0145	PD	3	b
2021	23	Champignons émincés SAM	Slices mushrooms MAP	+	O26	0157/ O26	O26	O26		026	+	O26	PA	O157/ O26	O26	O26	O26	+	O26	PA	3	b
2021	24	Choux rouge émincés SAM	Red cabbage MAP	+	O26	O26	O26	O26		026	+	O26	PA	O26	O26	O26	O26	+	O26	PA	3	b
2021	25	Choux blancs émincés SAM	Sliced white cabbage MAP	+	O111	O111	O111	O111		0111	+	O111	PA	O111	O111	O111	O111	+	O111	PA	3	b
2021	26	Mélange crudités SAM	Mix of vegetables MAP	-	/	-	-			-	-	/	NA	-	-	-	-	-	-	NA	3	b
2021	27	Carottes râpées SAM	Grated carrots MAP	+	O111	-/-	O111			0111	-	/	ND	O111	O111	O111	O111	+	O111	PA	3	b
2021	35	Petits pois surgelés	Frozen peas	+	O111	O111	O111	O111		0111	+	O111	PA	O111/ O45/ O121	O111	O111	O111	+	O111	PA	3	b
2021	37	Courges butternut surgelées	Frozen butternut	+	O26	O26	O26	O26		026	+	O26	PA	O26	O26	O26	O26	+	O26	PA	3	b
2021	39	Courgettes surgelées	Frozen zucchini	+	O103	-	-			-	-	/	ND	-	-	-	-	-	-	ND	3	b
2021	40	Carottes surgelées	Frozen carrots	+	O103	O103	O103	O103		0103	+	O103	PA	O103	O103	O103	O103	+	O103	PA	3	b
2020	4107	Melon charentais coupé	Cut melon	-	/	-	-				-	/	NA	-	-	-	-	-	-	NA	3	c
2020	4108	Ananas coupé	Cut pineapple	+	O145	O145	O145	O145		0145	+	O145	PA	O145	O145	O145	O145	+	O145	PA	3	c
2020	4109	Pastèque coupée	Cut watermelon	-	/	0145	0145	0145		0145	+	0145	PD	0145	0145	0145	0145	+	0145	PD	3	c
2020	4111	Salade de fruits frais	Fresh fruit salad	+	O103	O103	O103	O103		0103	+	O103	PA	O103	O103	O103	O103	+	O103	PA	3	c
2020	4235	Fruits frais coupés (melon, orange, raisin, pastèque)	Fresh cut fruits (melon, orange, grape, watermelon)	-	/	-	-			-	-	/	NA	-	-	-	-	-	-	NA	3	c
2020	4236	Ananas coupé	Cut Pineapple	-	/	-	-			-	-	/	NA	-	-	-	-	-	-	NA	3	c
2020	4237	Jus de mangue passion frais	Fresh juice (mango, passion)	-	/	-	-			-	-	/	NA	-	-	-	-	-	-	NA	3	c
2020	4238	Jus de citron frais	Fresh lemon juice	-	/	-	-			-	-	/	NA	-	-	-	-	-	-	NA	3	c
2020	4239	Morceaux de mangue surgelées	Frozen cut mango	-	/	-	-			-	-	/	NA	-	-	-	-	-	-	NA	3	c

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2020	4240	Billes de melon surgelés	Frozen melon	-	/	-	-		-	-	/	NA	-	-		-	-	/	NA	3 c	
2021	8	Jus de fruits frais (pomme et mangue)	Fresh juice (apple, mango)	-	/	-	-		-	-	/	NA	-	-		-	-	/	NA	3 c	
2021	9	Jus de fruits frais (ananas et fruits de la passion)	Fresh juice (pineapple, passion fruits)	-	/	0111	0111	0111	0111	+	0111	PD	0111	0111	0111	0111	0111	+	0111	PD	3 c
2021	10	Jus de 4 fruits frais	Fresh juice	+	0111	0111	0111	0111	0111	+	0111	PA	0111	0111	0111	0111	0111	+	0111	PA	3 c
2021	28	Salade de fruits coupés (ananas, pomme, raisin)	Mix of cut fruits (Pineapple, Apple, Grape)	+	0157	0157	0157	0157	0157	+	0157	PA	0157	0157	-		0157	+	0157	PA	3 c
2021	29	Salade de fruits coupés (myrtille, ananas, framboise)	Mix of cut fruits (Blueberry, pineapple, raspberry)	+	0157	0157	0157	0157	0157	+	0157	PA	0157	0157	-		0157	+	0157	PA	3 c
2021	33	Abricot surgelé	Frozen apricots	+	0111	-	-		-	-	/	ND	-	-		-	-	-	/	ND	3 c
2021	34	Fruits rouges surgelés	Frozen red fruits	-	/	-	-		-	-	/	NA	-	-		-	-	-	/	NA	3 c
2021	36	Pommes en cubes surgelés	Frozen cut apples	-	/	-	-		-	-	/	NA	-	-		-	-	-	/	NA	3 c
2021	38	Figues surgelées	Frozen figs	+	0103	-/0103/0103	0103	0103		0103	-	ND	0103	-	-	-	0103 (72h)	+	0103	PA	3 c
2021	256	Jus de fruits frais Tutti frutti	Fresh juice (mix)	+	026	026	026	026	026	+	026	PA	026	026	026	026	026	+	026	PA	3 c
2021	257	Jus de fruits frais (myrtille, cassis, pomme et cranberry)	Fresh juice (blueberry, blackcurrant, apple and cranberry)	+	026	026	026	026	026	+	026	PA	026	026	026	026	026	+	026	PA	3 c
2021	258	Jus de fruits frais (pomme et fruits rouges)	Fresh juice (apple and red fruits)	+	0111	-	-		-	-	/	ND	-	-		-	-	-	/	ND	3 c

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				Final result PCR	Confirmation 10 h + 72 h				Final Result		Agreement	Final result PCR	Confirmation 24 h + 72 h				Final Result		Category	Type	
					Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Global result	Sero-group			Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Global result	Sero-group			
2020	3799	Jeunes pousses Mesclun	Baby leaves (Mesclun)	-	/	O157/O103/ O26/O45/ O121	-	0157		0157	+	O157	PD	O157/O103/ O26/O45/ O121	-	-	0157	0157	+ O157	PD 3 a	
2020	3800	Jeunes pousses Epinards	Baby leaves (Spinach)	+	O157	O157	O157	O157		O157	+	O157	PA	O157	O157	O157	O157	+	O157	PA 3 a	
2020	3801	Jeunes pousses Roquette	Baby leaves (Arugula)	+	O157	O157	O157	O157		O157	+	O157	PA	O157	O157	O157	O157	+	O157	PA 3 a	
2020	3802	Jeunes pousses Roquette	Baby leaves (Arugula)	+	O111	O111	O111	O111		O111	+	O111	PA	O111	O111	O111	O111	+	O111	PA 3 a	
2020	3804	Jeunes pousses Mélange 6 saveurs SAM	Mix of baby leaves	-	/	-/-O111	O111	O111		0111	-	/	NA	O111/O45/ O121	-	-	-	-	/	PPNA 3 a	
2020	3805	Jeunes pousses Roquette	Baby leaves (Arugula)	+	O145	O111/O145	O145	O145		O145	+	O145	PA	O111/O145	-	0145		O145	+	O145	PA 3 a
2020	3806	Pousses d'épinards	Baby leaves (Spinach)	+	O145	O103/O145	-	0145		O145	+	O145	PA	O103/O145	-	0145		O145	+	O145	PA 3 a
2020	3807	Mélange de jeunes pousses SAM	Mix of baby leaves	+	O103	O103/O145	-	0103		O103	+	O103	PA	O103/O145/ O45/O121	-	0103		O103	+	O103	PA 3 a
2020	3808	Pousses d'épinards	Baby leaves (Spinach)	-	/	O103	O103	O103		O103	+	O103	PD	O103	O103	O103	O103	+	O103	PD 3 a	
2020	4105	Salade frisée	Curly lettuce	-	/	O157/O26/ O45/O121	-	026		026	+	O26	PD	O157/O26	-	026		O26	+	O26	PD 3 a
2020	4106	Chou	Cabbage	+	O26	-	-		-	-	-	/	ND	-	-	-	-	-	/	ND 3 a	
2020	4251	Laitue	Lettuce	-	/	O103/O45/ O121	-	-		-	-	/	PPNA	O103	-	-	-	-	/	PPNA 3 a	
2020	4252	Scarole	Salad (Escarole)	-	/	O103/O145/ O45/O121	-	-		-	-	/	PPNA	O103/O145	-	-	-	-	/	PPNA 3 a	
2020	4253	Batavia	Salad (Batavia)	-	/	-	-		-	-	-	/	NA	-	-	-	-	-	/	NA 3 a	
2021	21	Feuilles de blettes	Corn leaves	+	O145	O145	O145	O145		O145	+	O145	PA	O145	O145	O145	O145	+	O145	PA 3 a	
2021	30	Chou rouge	Red cabbage	-	/	-	-		-	-	-	/	NA	-	-	-	-	-	/	NA 3 a	
2020	4113	Assiette croquantes (mélange salade, carottes)	Mix of vegetables MAP	-	/	O145	O145	O145		O145	+	O145	PD	O145	O145	O145	O145	+	O145	PD 3 b	
2021	2	Salade 4 saveurs en sachet SAM	Mix of vegetables MAP	+	O26	-	-		-	-	-	/	ND	-	-	-	-	-	/	ND 3 b	
2021	6	Mélanges crudités en sachet SAM	Mix of vegetables MAP	+	O157	-	-		-	-	-	/	ND	-	-	-	-	-	/	ND 3 b	
2021	7	Carottes râpées en sachet SAM	Grated carrots MAP	-	/	O145	O145	O145		O145	+	O145	PD	O145	O145	O145	O145	+	O145	PD 3 b	
2021	23	Champignons émincés SAM	Slices mushrooms MAP	+	O26	O157/O26	O26	O26		O26	+	O26	PA	O157/O26	O26	O26	O26	+	O26	PA 3 b	
2021	24	Choux rouge émincés SAM	Red cabbage MAP	+	O26	O26	O26	O26		O26	+	O26	PA	O26	O26	O26	O26	+	O26	PA 3 b	

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

ADRIA

89/117

October 29, 2024

Summary report (Version 0)

SureTect Escherichia coli O157:H7 and STEC PCR

VEGETABLES INCLUDING FRUITS - 375 g (Excluding sprouted seeds) (Extension 2021)

Date	Sample N°	Product (French name)	Product	Reference method: ISO 13136* Result		Alternative method: SureTect STEC												Category	Type			
						BPW pre-warmed (41.5°C) 10 h at 41.5±1°C and storage 72 h at 5 ± 3°C						BPW prewarmed (41.5°C) 24 h at 41.5 ± 1°C and storage 72 h at 5 ± 3°C										
						Confirmation 10 h + 72 h				Final Result		Agreement	Final result PCR	Confirmation 24 h + 72 h				Final Result	Agreement			
				Global result	Sero-group	Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Global result	Sero-group			Final result confirmation direct streaking	Final result confirmation IMS	Final result confirmation IMS diluted	Final result all confirmatory tests	Global result	Sero-group			
2021	25	Choux blancs émincés SAM	Sliced white cabbage MAP	+	O111	O111	O111		O111	+	O111	PA	O111	O111	O111		O111	+	O111	PA	3 b	
2021	27	Carottes râpées SAM	Grated carrots MAP	+	O111	-/-	O111	O111		0111	-	/	ND	O111	O111	O111		O111	+	O111	PA	3 b
2021	35	Petits pois surgelés	Frozen peas	+	O111	O111	O111	O111		O111	+	O111	PA	O111	O111	O111		O111	+	O111	PA	3 b
2021	37	Courges butternut surgelées	Frozen butternut	+	O26	O26	O26	O26		O26	+	O26	PA	O26	O26	O26		O26	+	O26	PA	3 b
2021	39	Courgettes surgelées	Frozen zucchini	+	O103	-	-			-	-	/	ND	-	-	-		-	-	/	ND	3 b
2021	40	Carottes surgelées	Frozen carrots	+	O103	O103	O103	O103		O103	+	O103	PA	O103	O103	O103		O103	+	O103	PA	3 b
2020	4108	Ananas coupé	Cut pineapple	+	O145	O145	O145	O145		O145	+	O145	PA	O145	O145	O145		O145	+	O145	PA	3 c
2020	4109	Pastèque coupée	Cut watermelon	-	/	O145	O145	O145		O145	+	O145	PD	O145	O145	O145		O145	+	O145	PD	3 c
2020	4111	Salade de fruits frais	Fresh fruit salad	+	O103	O103	O103	O103		O103	+	O103	PA	O103	O103	O103		O103	+	O103	PA	3 c
2021	9	Jus de fruits frais (ananas et fruits de la passion)	Fresh juice (pineapple, passion fruits)	-	/	O111	O111	O111		O111	+	O111	PD	O111	O111	O111		O111	+	O111	PD	3 c
2021	10	Jus de 4 fruits frais	Fresh juice	+	O111	O111	O111	O111		O111	+	O111	PA	O111	O111	O111		O111	+	O111	PA	3 c
2021	28	Salade de fruits coupés (ananas, pomme, raisin)	Mix of cut fruits (Pineapple, Apple, Grape)	+	O157	O157	O157	O157		O157	+	O157	PA	O157	O157	O157		O157	+	O157	PA	3 c
2021	29	Salade de fruits coupés (myrtille, ananas, framboise)	Mix of cut fruits (Blueberry, pineapple, raspberry)	+	O157	O157	O157	O157		O157	+	O157	PA	O157	O157	O157		O157	+	O157	PA	3 c
2021	33	Abricot surgelé	Frozen apricots	+	O111	-	-			-	-	/	ND	-	-	-		-	-	/	ND	3 c
2021	38	Figues surgelées	Frozen figs	+	O103	O103	O103	O103		O103	+	O103	PA	O103	-	0103		O103	+	O103	PA	3 c
2021	256	Jus de fruits frais Tutti frutti	Fresh juice (mix)	+	O26	O26	O26	O26		O26	+	O26	PA	O26	O26	O26		O26	+	O26	PA	3 c
2021	257	Jus de fruits frais (myrtille, cassis, pomme et cranberry)	Fresh juice (blueberry, blackcurrant, apple and cranberry)	+	O26	O26	O26	O26		O26	+	O26	PA	O26	O26	O26		O26	+	O26	PA	3 c
2021	258	Jus de fruits frais (pomme et fruits rouges)	Fresh juice (apple and red fruits)	+	O111	-	-			-	-	/	ND	-	-	-		-	-	/	ND	3 c

Appendix 5 – Relative level of detection study: raw data

Matrix: Frozen ground beef (25 g)

Strain: *E. coli* O157:H7 Ad683

stx1- / stx2+ / eae+

Aerobic mesophilic flora: 4.2×10^2 CFU/g

15 days at -20°C

Initial validation (2020)

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136*		Alternative method: SureTect STEC											
			Result		Number of positive samples/ Total of samples	BPW pre-warmed (41.5°C) for 8 h at 41.5°C				Number of positive samples/ Total of samples	BPW pre-warmed (41.5°C) for 24 h at 41.5°C				Number of positive samples/ Total of samples	
			Final result PCR	Final result confirmation direct streaking		Final result confirmation IMS	Final result all confirmatory tests	Final result	Final result		Final result PCR	Final result confirmation direct streaking	Final result confirmation IMS	Final result all confirmatory tests		
8358	0	/	-	/	0/5	-	-	/	-	0/5	-	-	/	-	/	
8359			-	/		-	-	/	-		-	-	/	-	/	
8360			-	/		-	-	/	-		-	-	/	-	/	
8361			-	/		-	-	/	-		-	-	/	-	/	
8362			-	/		-	-	/	-		-	-	/	-	/	
1	1	1.4	-	/	14/20	0157	0157	0157	0157	15/20	0157	0157	0157	0157	+ 0157	15/20
2			+	0157		-	-	/	-		-	-	/	-	/	
3			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
4			+	0157		-	-	/	-		-	-	/	-	/	
5			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
6			-	/		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
7			-	/		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
8			+	0157		-	-	/	-		-	-	/	-	/	
9			+	0157		-	-	/	-		-	-	/	-	/	
10			-	/		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
11			-	/		-	-	/	-		-	-	/	-	/	
12			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
13			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
14			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
15			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
16			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
17			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
18			-	/		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
19			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
20			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
21	2	5.9	+	0157	5/5	0157	0157	0157	+	5/5	0157	0157	0157	0157	+ 0157	5/5
22			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
23			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
24			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	
25			+	0157		0157	0157	0157	+		0157	0157	0157	0157	+ 0157	

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

Matrix: Frozen ground beef (375 g for the alternative method and 25 g for the reference method)

Extension 2020

Strain : *E. coli* O145:H28 1502-105

stx1- / stx2+ / eae+

Aerobic mesophilic flora: 2800 CFU/g

15 days at -20°C

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136*		Alternative method: SureTect STEC														
			Result		Number of positive samples/ Total of samples	Final Result PCR	BPW pre-warmed 1-in-5 (41.5°C) for 8 h at 41.5°C			Final Result	Number of positive samples/ Total of samples	Final Result PCR	BPW pre-warmed 1-in-5 (41.5°C) for 24 h at 41.5°C			Final Result			
			Global result	Serogroup			Final result confirmation direct streaking	Final result confirmation IMS	Final result all confirmatory tests				Final result confirmation direct streaking	Final result confirmation IMS	Final result all confirmatory tests				
4482	0	/	-	/	0/5	-	-		-	-	/	0/5	-	-	-	-	/	0/5	
4483			-	/		-	-		-	-	/		-	-	-	-	/		
4484			-	/		-	-		-	-	/		-	-	-	-	/		
4485			-	/		-	-		-	-	/		-	-	-	-	/		
4486			-	/		-	-		-	-	/		-	-	-	-	/		
4492	1	1.0	+	O145	16/20	O145	O145	O145	O145	+	O145	14/20	O145	O145	O145	O145	+	O145	15/20
4493			-	/		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4494			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4495			+	O145		-	-		-	-	/		-	-	-	-	/		
4496			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4497			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4498			+	O145		-	-		-	-	/		-	-	-	-	/		
4499			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4500			-	/		-	-		-	-	/		-	-	-	-	/		
4501			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4502			+	O145		-	-		-	-	/		-	-	-	-	/		
4503			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4504			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4505			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4506			-	/		O145	O145	O145	O145	+	O145		O146	O145	O145	O145	+	O145	
4507			-	/		-/-	O145	O145	O145	0145	-	/	O145	O145	O145	+	O145		
4508			+	O145		-	-		-	-	/	-	-	-	-	/			
4509			+	O145		O145	O145	O145	O145	+	O145	O145	O145	O145	O145	+	O145		
4510			+	O145		O145	O145	O145	O145	+	O145	O145	O145	O145	O145	+	O145		
4511			+	O145		O145	O145	O145	O145	+	O145	O145	O145	O145	O145	+	O145		
4487	2	2.0	+	O145	5/5	O145	O145	O145	O145	+	O145	5/5	O145	O145	O145	O145	+	O145	5/5
4488			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4489			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4490			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	
4491			+	O145		O145	O145	O145	O145	+	O145		O145	O145	O145	O145	+	O145	

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

Matrix: Raw milk (25 g)

Strain : *E. coli* O26 Ad1741

stx1+ / stx2- / eae+

Aerobic mesophilic flora: 1.5 x10⁵ CFU/g

48 h at 3±2°C

Initial validation (2020)

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136*		Alternative method: SureTect STEC							Number of positive samples/ Total of samples	
			Result		Number of positive samples/ Total of samples	Final result PCR	Confirmation			Final result			
			Global result	Serogroup			Final result confirmation direct streaking	Final result confirmation IMS	Final result all confirmatory tests				
			-	/			-	/	-	-	/		
312	0	/	-	/	0/5	0/5	-	-	/	-	/	0/5	
313			-	/			-	-	/	-	/		
314			-	/			-	-	/	-	/		
315			-	/			-	-	/	-	/		
316			-	/			-	-	/	-	/		
317	1	2.8	+	O26	14/20	O26	026	026	026	026	+	O26	17/20
318			-	/			026	026	026	026	+	O26	
319			+	O26			-/-	026	026	026	-	/	
320			+	O26			026	026	026	026	+	O26	
321			+	O26			026	026	026	026	+	O26	
322			-	/			026	026	026	026	+	O26	
323			+	O26			026	026	026	026	+	O26	
324			+	O26			026	026	026	026	+	O26	
325			+	O26			026	026	026	026	+	O26	
326			-	/			026	026	026	026	+	O26	
327			-	/			026	026	026	026	+	O26	
328			-	/			026	026	026	026	+	O26	
329			+	O26			-/-	026	026	026	-	/	
330			+	O26			026	026	026	026	+	O26	
331			+	O26			-	-	/	-	-	/	
332			+	O26			026	026	026	026	+	O26	
333			+	O26			026	026	026	026	+	O26	
334			+	O26			026	026	026	026	+	O26	
335			+	O26			026	026	026	026	+	O26	
336			-	/			026	026	026	026	+	O26	
337	2	6.9	+	O26	5/5	O26	026	026	026	026	+	O26	5/5
338			+	O26			026	026	026	026	+	O26	
339			+	O26			026	026	026	026	+	O26	
340			+	O26			026	026	026	026	+	O26	
341			+	O26			026	026	026	026	+	O26	

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

Matrix: Raw milk cheese (25 g)

Strain : *E. coli* O103:H2 03-35

stx1+ / stx2- / eae+

Aerobic mesophilic flora: 2 x 10⁸ CFU/g

48 h at 3±2°C

Initial validation (2020)

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136*		Alternative method: SureTect STEC						Number of positive samples/ Total of samples	
					BPW + acriflavin at 41.5°C for 16 h at 41.5°C			Confirmation				
			Result		Number of positive samples/ Total of samples	Final result PCR	Final result confirmation direct streaking	Final result confirmation IMS	Final result all confirmatory tests	Final result		
Global result	Serogroup						Global result	Sero group	Global result	Global result	Sero group	
8230	0	/	-	/	0/5	-	-	/	-	-	/	0/5
8231			-	/		-	-	/	-	-	/	
8232			-	/		-	-	/	-	-	/	
8233			-	/		-	-	/	-	-	/	
8234			-	/		-	-	/	-	-	/	
235	1	1.6	-	/	9/20	-	-	/	-	-	/	6/20
236			-	/		O103	O103	O103	O103	+	O103	
237			-	/		-	-	/	-	-	/	
238			+	O103		-	-	/	-	-	/	
239			+	O103		-	-	/	-	-	/	
240			+	O103		-	-	/	-	-	/	
241			-	/		-	-	/	-	-	/	
242			+	O103		-	-	/	-	-	/	
243			-	/		-	-	/	-	-	/	
244			-	/		-	-	/	-	-	/	
245			+	O103		-	-	/	-	-	/	
246			-	/		O103	O103	O103	O103	+	O103	
247			+	O103		O103	O103	O103	O103	+	O103	
248			-	/		-	-	/	-	-	/	
249			-	/		-	-	/	-	-	/	
250			-	/		-	-	/	-	-	/	
251			-	/		O103	O103	O103	O103	+	O103	
252			+	O103		O103	O103	O103	O103	+	O103	
253			+	O103		O103	O103	O103	O103	+	O103	
254			+	O103		-	-	/	-	-	/	
8245	2	3.3	+	O103	5/5	O103	-	O103	O103	+	O103	5/5
8246			+	O103		O103	O103	O103	O103	+	O103	
8247			+	O103		O103	O103	O103	O103	+	O103	
8248			+	O103		O103	O103	O103	O103	+	O103	
8249			+	O103		O103	O103	O103	O103	+	O103	

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

Matrix: Baby leaves (25 g)

Strain : *E. coli* O111 Ad981

stx1+ / stx2- / eae+

Aerobic mesophilic flora: 9.9 x 10⁶ CFU/g

48 h at 3±2°C

Initial validation (2020)

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136*		Alternative method: SureTect STEC												
					BPW pre-warmed (41.5°C) for 8 h at 41.5°C					BPW pre-warmed (41.5°C) for 24 h at 41.5°C							
			Result	Number of positive samples/ Total of samples	Final result PCR	Confirmation 8 h		Final result		Final result PCR	Confirmation 24 h		Final result		Number of positive samples/ Total of samples		
			Global result	Serogroup		Final result confirmation direct streaking	Final result confirmation IMS	Final result all confirmatory tests	Global result		Final result confirmation direct streaking	Final result confirmation IMS	Final result all confirmatory tests	Global result	Serogroup		
384	0	/	-	/	0/5	-	-		-	/	0/5	-	-	-	-	/	0/5
385			-	/		-	-		-	/		-	-	-	-	/	
386			-	/		-	-		-	/		-	-	-	-	/	
387			-	/		-	-		-	/		-	-	-	-	/	
388			-	/		-	-		-	/		-	-	-	-	/	
389	1	1.0	-	/	5/20	-	-		-	/	4/20	-	-	-	-	/	4/20
390			-	/		-	-		-	/		-	-	-	-	/	
391			-	/		-	-		-	/		-	-	-	-	/	
392			-	/		-	-		-	/		-	-	-	-	/	
393			-	/		-	-		-	/		-	-	-	-	/	
394			-	/		-	-		-	/		-	-	-	-	/	
395			-	/		-	-		-	/		-	-	-	-	/	
396			+	O111		-	-		-	/		-	-	-	-	/	
397			+	O111		-	-		-	/		-	-	-	-	/	
398			-	/		O111	O111	O111	O111	+	O111	0/5	O111	O111	O111	O111	+ O111
399			-	/		-	-		-	/	-	-	-	-	/		
400			+	O111		-	-		-	/	-	-	-	-	/		
401			-	/		O111	O111	O111	O111	+	O111	O111	O111	O111	O111	+ O111	
402			-	/		-	-		-	/	-	-	-	-	/		
403			-	/		-	-		-	/	-	-	-	-	/		
404			-	/		-	-		-	/	-	-	-	-	/		
405			+	O111		O111	O111	O111	O111	+	O111	O111	O111	O111	O111	+ O111	
406			+	O111		-	-		-	/	-	-	-	-	/		
407			-	/		-	-		-	/	-	-	-	-	/		
408			-	/		O111	O111	O111	O111	+	O111	O111	O111	O111	O111	+ O111	
409	2	4.4	-	/	2/5	-	-		-	/	4/5	-	-	-	-	/	4/5
410			-	/		O111	O111	O111	O111	+	O111	O111	O111	O111	O111	+ O111	
411			+	O111		O111	O111	O111	O111	+	O111	O111	O111	O111	O111	+ O111	
412			+	O111		O111	O111	O111	O111	+	O111	O111	O111	O111	O111	+ O111	
413			-	/		O111	O111	O111	O111	+	O111	O111	O111	O111	O111	+ O111	

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

Matrix:Tomatoes (25 g)

Strain : *E. coli* O145 Ad983

stx1-/ stx2+ / eae+

Aerobic mesophilic flora: 7.2×10^4 CFU/g

48 h at 3±2°C

Initial validation (2020)

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136*		Alternative method: SureTect STEC													
			Result		Final result PCR	BPW pre-warmed (41.5°C) for 8 h at 41.5°C			Final result	Number of positive samples/ Total of samples	BPW pre-warmed (41.5°C) for 24 h at 41.5°C			Final result	Number of positive samples/ Total of samples			
			Global result	Serogroup		Final result confirmation direct streaking	Final result confirmation IMS	Final result all confirmatory tests			Global result	Serogroup	Final result confirmation direct streaking	Final result confirmation IMS	Final result all confirmatory tests	Global result	Serogroup	
414	0	/	-	/	0/5	-	-	-	-	0/5	-	-	-	-	-	-	/	0/5
415			-	/		-	-	-	-		-	-	-	-	-	-	/	
416			-	/		-	-	-	-		-	-	-	-	-	-	/	
417			-	/		-	-	-	-		-	-	-	-	-	-	/	
418			-	/		-	-	-	-		-	-	-	-	-	-	/	
419	1	1.2	+	O145	18/20	O145	O145	O145	O145	+ O145	13/20	O145	O145	O145	O145	+	O145	13/20
420			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
421			+	O145		-	-	-	-	/		-	-	-	-	-	/	
422			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
423			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
424			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
425			-	/		-	-	-	-	/		-	-	-	-	-	/	
426			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
427			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
428			+	O145		-	-	-	-	/		-	-	-	-	-	/	
429			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
430			+	O145		-	-	-	-	/		-	-	-	-	-	/	
431			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
432			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
433			-	/		-	-	-	-	/		-	-	-	-	-	/	
434			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
435			+	O145		-	-	-	-	/		-	-	-	-	-	/	
436			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
437			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
438			+	O145		-	-	-	-	/		-	-	-	-	-	/	
439	2	6.2	+	O145	5/5	O145	O145	O145	O145	+ O145	5/5	O145	O145	O145	O145	+	O145	5/5
440			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
441			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
442			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	
443			+	O145		O145	O145	O145	O145	+ O145		O145	O145	O145	O145	+	O145	

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

Matrix: Baby leaves (375 g for the alternative method and 25 g for the reference method)

Extension study (2021)

Strain : *E. coli* O157:H7 Ad3118

stx1+ / stx2+ / eae+

Aerobic mesophilic flora: 3,6 10⁷ CFU/g

48 h at 3± 2°C

Sample N°	Level	Contamination level (CFU/Sample)	Reference method: ISO/TS 13136*		Alternative method: SureTect STEC													
			BPW prewarmed 1-in-10 (41.5°C) for 10 h at 41.5°C		BPW pre-warmed 1-in-10 (41.5°C) for 24 h at 41.5°C													
			Confirmation 10 h		Final result confirmation direct streaking		Final result confirmation IMS		Final result all confirmatory tests		Final result		Number of positive samples/ Total of samples		Confirmation 24 h		Final result	
41	0	/	-	/	0/5	-	-	-	-	-	/	0/5	-	-	-	-	-	/
42			-	/		-	-	-	-	-	/		-	-	-	-	-	/
43			-	/		-	-	-	-	-	/		-	-	-	-	-	/
44			-	/		-	-	-	-	-	/		-	-	-	-	-	/
45			-	/		-	-	-	-	-	/		-	-	-	-	-	/
320	1	0,8	+	O157	8/20	-	-	-	-	-	/	12/20	-	-	-	-	-	/
321			-	/		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
322			+	O157		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
323			-	/		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
324			+	O157		-	-	-	-	-	/		-	-	-	-	-	/
325			-	/		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
326			-	/		-	-	-	-	-	/		-	-	-	-	-	/
327			+	O157		-	-	-	-	-	/		-	-	-	-	-	/
328			+	O157		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
329			-	/		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
330			+	O157		-	-	-	-	-	/		-	-	-	-	-	/
331			-	/		-	-	-	-	-	/		-	-	-	-	-	/
332			-	/		O157	-	O157	O157	+	O157		O157	O157	O157	O157	+	O157
333			+	O157		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
334			-	/		-	-	-	-	-	/		-	-	-	-	-	/
335			-	/		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
336			-	/		-	-	-	-	-	/		-	-	-	-	-	/
337			+	O157		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
338			-	/		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
339			-	/		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
46	2	5,5	+	O157	5/5	O157	O157	O157	O157	+	O157	5/5	O157	O157	O157	O157	+	O157
47			+	O157		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
48			+	O157		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
49			+	O157		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157
50			+	O157		O157	O157	O157	O157	+	O157		O157	O157	O157	O157	+	O157

* Analyses performed according to the COFRAC accreditation (Accreditation Testing n°1-0144, scope available on www.cofrac.fr)

Appendix 6 – Inclusivity and exclusivity study: raw data

LNR strains
ADRIA Strains

INCLUSIVITY																					
Nº	Strain	Serotype	Reference	Origin	Virulence gene			Inoculation CFU/225 mL	Alternative method: SureTect STEC BPW + 5 mg/L acriflavin for 16 h at 41.5°C												PCR Final result
									PCR Result						Identification						
					E. coli O157:H7-Screening						Identification						O103		O111	O145	O26
stx1	stx2	eae	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	PCR Final result	Confirmation Final result						
1	Escherichia coli	O26:H11	CIP 104673	/	+	-	+	10	28.33	27.74	-	-	30.95	28.43	-	-	-	31.16	-	O26	O26
2	Escherichia coli	O26	Ad1741	Raw milk cheese	+	-	+	18	22.04	27.39	-	-	24.33	28.17	-	-	-	24.08	-	O26	O26
3	Escherichia coli	O26	Ad2298	Dairy product	+	-	+	24	21.18	26.84	-	-	23.39	27.76	-	-	-	25.16	-	O26	O26
4	Escherichia coli	O26	Ad2303	Raw milk cheese	-	+	+	25	22.23	27.40	-	-	24.72	27.16	-	-	-	24.68	-	O26	O26
5	Escherichia coli	O26	Ad2671	Dairy product	-	+	+	22	21.19	26.59	-	-	21.97	27.49	-	-	-	24.30	-	O26	O26
6	Escherichia coli	O26	Ad2675	Raw milk cheese	-	+	+	38	20.60	26.73	-	-	22.79	26.66	-	-	-	22.75	-	O26	O26
7	Escherichia coli	O26	Ad2678	Dairy product	+	-	+	18	22.16	27.48	-	-	24.05	27.54	-	-	-	24.40	-	O26	O26
8	Escherichia coli	O26:H11	1377-138 LOT 3	Meat	-	+	+	26	20.58	27.08	-	-	22.38	26.65	-	-	-	22.48	-	O26	O26
9	Escherichia coli	O26:H11	12-62	Meat	+	-	+	24	21.87	27.63	-	-	24.07	26.06	-	-	-	23.73	-	O26	O26
10	Escherichia coli	O26:H11	14-53	Meat	+	-	+	46	21.35	27.52	-	-	24.07	26.27	-	-	-	22.52	-	O26	O26
11	Escherichia coli	O26:H11	1311-12	Cream	-	+ (a)	+	41	23.40	28.15	-	-	25.81	27.24	-	-	-	24.68	-	O26	O26
12	Escherichia coli	O26:H11	375-122	Cheese	+	+ (c,d)	+	38	21.60	27.49	-	-	23.02	26.04	-	-	-	22.88	-	O26	O26
13	Escherichia coli	O103	Ad982	Animal	+	-	+	40	21.01	26.79	-	-	21.76	26.63	21.65	-	-	-	-	O103	O103
14	Escherichia coli	O103	Ad1772	/	+	-	+	28	21.14	27.46	-	-	22.84	26.16	21.13	-	-	-	-	O103	O103
15	Escherichia coli	O103:H2	Ad1773	Cheese	+	+	+	39	21.99	27.63	-	-	23.96	26.68	22.29	-	-	-	-	O103	O103
16	Escherichia coli	O103:H2	1144	Dairy product	+	-	+	67	21.32	28.25	-	-	23.55	26.44	21.54	-	-	-	-	O103	O103
17	Escherichia coli	O103:H2	821-76	Dairy product	+	+	+	50	20.24	26.66	-	-	20.61	24.43	20.52	-	-	-	-	O103	O103
18	Escherichia coli	O103:H2	56-12	Meat	+	-	+	32	21.47	26.55	-	-	23.34	26.53	21.88	-	-	-	-	O103	O103
19	Escherichia coli	O103:H2	262-03-18-1	Meat	-	+	+	31	20.47	27.01	-	-	22.28	26.78	20.94	-	-	-	-	O103	O103
20	Escherichia coli	O103:H2	V92-362	Meat	+	-	+	13	22.27	27.53	-	-	22.96	25.62	21.91	-	-	-	-	O103	O103
21	Escherichia coli	O103:H2	03-35	Meat	+	-	+	44	21.58	29.78	-	-	23.85	26.22	21.03	-	-	-	-	O103	O103
22	Escherichia coli	O103:H2	72-11	Meat	+	-	+	36	20.43	27.12	-	-	21.37	27.80	21.26	-	-	-	-	O103	O103
23	Escherichia coli	O111:H8	Ad511	Clinic	+	+	+	41	21.33	27.19	-	-	21.95	28.06	-	23.66	-	-	-	O111	O111
24	Escherichia coli	O111	Ad981	Animal	+	+	+	19	23.16	28.08	-	-	24.62	28.39	-	26.46	-	-	-	O111	O111
25	Escherichia coli	O111:H8	1251-31	Dairy product	+ (a)	+ (c,d)	+	21	23.97	28.00	-	-	25.39	28.32	-	26.39	-	-	-	O111	O111
26	Escherichia coli	O111:H8	1391-40	Dairy product	+	-	+	18	29.73	29.08	-	-	31.55	28.02	-	33.11	-	-	-	O111	O111
27	Escherichia coli	O111:H8	577-54	Dairy product	+ (a)	+ (c,d)	+	21	25.32	28.39	-	-	26.49	28.35	-	27.60	-	-	-	O111	O111
28	Escherichia coli	O111:H8	593-95	Dairy product	+ (a)	+ (c,d)	+	32	25.67	28.86	-	-	26.55	28.52	-	27.82	-	-	-	O111	O111
29	Escherichia coli	O111:H8	622-4	Dairy product	+ (a)	+ (c,d)	+	17	25.75	28.19	-	-	26.42	28.43	-	28.34	-	-	-	O111	O111

INCLUSIVITY																				
N°	Strain	Serotype	Reference	Origin	Virulence gene			Inoculation CFU/225 mL	Alternative method: SureTect STEC BPW + 5 mg/L acriflavin for 16 h at 41.5°C											Confirmation Final result
									PCR Result						Identification					
					E. coli O157:H7-Screening						Identification					PCR Final result				
					stx1	stx2	eae		eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	
30	Escherichia coli	O145	Ad983	Animal	-	+	+	23	23.33	28.19	-	-	25.55	28.07	-	-	26.34	-	-	O145
31	Escherichia coli	O145	Ad2310	Unknown	-	+	+	33	23.90	28.76	-	-	25.73	27.89	-	-	26.26	-	-	O145
32	Escherichia coli	O145:H28	2305-1	Meat	-	+	+	17	23.81	28.26	-	-	26.14	27.86	-	-	25.96	-	-	O145
33	Escherichia coli	O145:H28	1331-100	Meat	-	+	+	25	23.42	28.41	-	-	25.56	28.23	-	-	27.11	-	-	O145
34	Escherichia coli	O145:H28	1502-105	Meat	-	+	+	23	22.88	28.20	-	-	25.20	27.08	-	-	24.37	-	-	O145
35	Escherichia coli	O145:H28	1867-177	Meat	-	+	+	41	22.46	28.26	-	-	24.69	27.52	-	-	24.90	-	-	O145
36	Escherichia coli	O145:H28	092-4	Meat	-	+	+	13	25.20	28.59	-	-	27.31	28.40	-	-	26.97	-	-	O145
37	Escherichia coli	O157:H7	769	Ground beef	-	+(a)	+	35	24.62	28.28	26.38	26.80	26.80	27.89	-	-	-	-	-	O157
38	Escherichia coli	O157:H7	803	Meat	-	+(c,d)	+	21	27.99	28.49	29.95	30.11	29.82	27.98	-	-	-	-	-	O157
39	Escherichia coli	O157:H7	1043	VHS beef	+(a)	+(c,d)	+	39	25.22	28.34	27.15	26.54	24.5	28.43						O157
40	Escherichia coli	O157:H7	1211-1	VHS beef	-	+	+	30	25.31	28.25	26.97	27.48	27.11	28.42	-	-	-	-	-	O157
41	Escherichia coli	O157:H7	52-33 N°34	VHS	-	+	+	20	25.80	28.41	36.82	27.96	27.80	28.80	-	-	-	-	-	O157
42	Escherichia coli	O157:H7	Ad683	Ground beef	+	+	+	43	24.22	28.50	26.16	26.62	26.20	27.97	-	-	-	-	-	O157
43	Escherichia coli	O157:H7	Ad685	Beef industry environment	-	+	+	32	25.90	28.53	27.92	28.08	27.78	28.48	-	-	-	-	-	O157
44	Escherichia coli	O157:H7	Ad489	Frozen beef balls	+	+	+	29	25.96	28.06	28.04	27.28	26.00	28.37	-	-	-	-	-	O157
45	Escherichia coli	O157:H7	ET8	Water treatment plant	-	+	+	22	26.76	28.32	29.04	28.31	28.64	28.5	-	-	-	-	-	O157
46	Escherichia coli	O157:H7	Ad924	Ground beef	-	+	+	30	25.24	27.97	27.51	26.68	26.35	28.62	-	-	-	-	-	O157
47	Escherichia coli	O157:H7	Ad1071	Ground beef	-	+	+	14	25.67	28.40	27.79	27.08	27.36	27.82	-	-	-	-	-	O157
48	Escherichia coli	O157:H7	Ad1174	Frozen ground beef	-	+	+	27	25.54	28.46	27.46	27.25	27.34	28.02	-	-	-	-	-	O157
49	Escherichia coli	O157:H7	Ad1745	Raw cheese	-	+	+	17	26.12	28.51	28.21	28.35	28.13	28.33	-	-	-	-	-	O157
50	Escherichia coli	O157:H7	Ad2222	Ground beef	-	+	+	31	25.59	28.62	27.65	27.93	27.93	27.78	-	-	-	-	-	O157

Nº	Strain	Serotype	Reference	Origin	Virulence gene			Inoculation level CFU/ml	EXCLUSIVITY											
									Alternative method: SureTect STEC BPW at 37°C for 24 h											
									PCR Result						Identification					
					stx1	stx2	eae		eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	
1	<i>Escherichia coli</i>	O26:H11	AEEC 335	Dairy product	-	-	+ b	3.0E+05	19.38	27.64	-	-	-	26.68	-	-	-	20.34	-	-
2	<i>Escherichia coli</i>	O157:H26	AEEC 561	Meat product	-	-	+ b	3.0E+05	19.40	29.72	-	21.07	-	28.89	-	-	-	-	-	-
3	<i>Escherichia coli</i>	O145:H28	AEEC 1387-177	Dairy product	-	-	+ g	3.2E+05	20.17	28.33	-	-	-	26.92	-	-	21.78	-	-	-
4	<i>Escherichia coli</i>	O145:H28-	529-64	Meat product	-	-	-	2.3E+05	-	28.77	-	-	-	29.21	-	-	-	-	-	-
5	<i>Escherichia coli</i>	O145:H28-	236-9	Dairy product	-	-	-	2.8E+05	-	29.03	-	-	-	29.22	-	-	-	-	-	-
6	<i>Escherichia coli</i>	O91:H21	13482	Dairy product	+	+b	-	2.6E+05	-	29.93	-	-	18.14	28.81	-	-	-	-	-	-
7	<i>Escherichia coli</i>	O113:H21	STEC-19-50	Meat product	-	+	-	2.1E+05	-	27.86	-	-	19.19	28.78	-	-	-	-	-	-
8	<i>Escherichia coli</i>	O111:H2	Ad513	Clinic	-	-	+	2.6E+05	20.13	28.60	-	-	-	28.38	-	20.73	-	-	-	-
9	<i>Escherichia coli</i>	O111	Ad1774	Clinic	-	+	-	2.6E+05	-	28.66	-	-	-	27.92	-	20.40	-	-	-	-
10	<i>Escherichia coli</i>	O103	Ad1743	Meat product	-	-	-	2.3E+05	-	28.38	-	-	-	26.49	18.44	-	-	-	-	-
11	<i>Escherichia coli</i>	O103	Ad1862	Dairy product	-	-	+	3.4E+05	20.15	29.35	-	-	-	27.23	19.62	-	-	-	-	-
12	<i>Escherichia coli</i>	O26	Ad1739	Dairy product	-	-	+	2.6E+05	21.22	29.94	-	-	-	26.57	-	-	-	19.73	-	-
13	<i>Escherichia coli</i>	O26	Ad1864	Meat product	-	-	+	2.9E+05	20.37	30.26	-	-	-	26.04	-	-	-	19.44	-	-
14	<i>Escherichia coli</i>	O26	Ad2677	Dairy product	-	-	+	2.0E+05	21.02	29.39	-	-	-	25.12	-	-	-	19.61	-	-
15	<i>Escherichia coli</i>	O157:H7	ENV177	Environment	-	-	+	1.6E+05	20.17	27.49	21.53	21.65	-	27.57	-	-	-	-	-	-
16	<i>Escherichia coli</i>	O157:H7	Ad2301	Environment	-	-	+	1.7E+05	19.99	28.75	21.34	21.67	-	28.65	-	-	-	-	-	-
17	<i>Escherichia coli</i>	O92:H33	Ad503	Clinic	-	-	-	2.0E+05	-	28.98	-	-	-	28.51	-	-	-	-	-	-
18	<i>Escherichia coli</i>	O78:H11	ATCC 35401	Clinic	-	-	-	1.3E+05	-	28.72	-	-	-	29.32	-	-	-	-	-	-
19	<i>Escherichia coli</i>	O6:H6	Ad506	Clinic	-	-	-	2.3E+05	-	28.90	-	-	-	29.46	-	-	-	-	-	-
20	<i>Escherichia coli</i>	O6:H10	Ad507	Clinic	-	-	-	2.6E+05	-	29.15	-	-	-	29.79	-	-	-	-	-	-
21	<i>Escherichia coli</i>	O86:H43	Ad509	Elephant	-	-	-	2.2E+05	-	29.31	-	-	-	29.85	-	-	-	-	-	-
22	<i>Escherichia coli</i>	O128:H2	Ad512	Clinic	-	-	+	2.4E+05	21.28	31.05	-	-	-	29.59	-	-	-	-	-	-
23	<i>Escherichia coli</i>	O78:K80:H12	ATCC 43896	Clinic	-	-	-	2.6E+05	-	28.78	-	-	-	28.25	-	-	-	-	-	-
24	<i>Escherichia coli</i>	O104:H21	Ad516	Clinic	-	-	-	2.7E+05	-	30.27	-	-	-	29.69	-	-	-	-	-	-
25	<i>Escherichia coli</i>	O55:H7	Ad518	Clinic	-	-	+	2.7E+05	19.48	28.05	29.71	-	-	28.67	-	-	-	-	-	-
26	<i>Escherichia coli</i>	O127:H6	Ad520	Clinic	-	-	+	1.5E+05	19.59	28.96	-	-	-	28.71	-	-	-	-	-	-
27	<i>Escherichia coli</i>	O126	Ad1776	Clinic	-	-	-	1.8E+05	-	28.32	-	-	-	28.03	-	-	-	-	-	-
28	<i>Escherichia coli</i>	O45:H2	Ad1778	Unknown	+	-	+	1.8E+05	20.98	31.35	-	-	22.00	28.14	-	-	-	17.38	-	-
29	<i>Escherichia coli</i>	O121	Ad1779	Unknown	-	-	+	1.9E+05	18.54	28.76	-	-	-	27.78	-	-	-	-	18.24	-
30	<i>Citrobacter rodentium</i>	/	ATCC 51116	Hamster	-	-	+	1.0E+05	-	28.52	-	-	-	28.41	-	-	-	-	-	-

Appendix 7 - Results obtained by the collaborative laboratories and the expert laboratory

CH: CHROMagar

CH-STEC: CHROMagar STEC

Collaborator A

Aerobic mesophilic flora: 45000 CFU/g

Collaborator: B

Aerobic mesophilic flora: 1500 CFU/g

N°Sample	Reference Method ISO/TS 13136										Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																		Final result														
											PCR Result									Confirmation																							
	ADRIA internal method																			Direct Streaking																							
	PCR results			Confirmation						Final Result	E. coli O157:H7 and STEC Screening									PCR on colonies									Direct streaking final result														
	stx	eae	sero-group		Final PCR Result	Direct streaking	IMS CH-STECK	IMS CT-RMAC	Latex O26	PCR (optional)	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Final PCR result	CCA	CH-STECK	Number of colonies tested	Latex O26	Plate	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121					
2	-	/	/	-	-/-*	+/-*	+ (1)	+	+	+	-	/	28.14	/	/	/	28.79	/	/	/	/	-	-	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA				
5	-	/	/	-	-/-*	-	/		-	-	/	27.16	/	/	/	27.00	/	/	/	/	/	-	-	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA					
9	-	/	/	-	-/-*	+ (3)/-*	+	+	+	+	-	/	27.99	/	/	/	22.77	/	/	/	/	-	-	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA					
10	-	/	/	-	-/-*	+ (4)/-*	+	+	+	+	-	/	27.92	/	/	/	27.70	/	/	/	/	-	-	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA					
12	-	/	/	-	-/-*	+ (5)/-*	+	+	+	+	-	/	27.16	/	/	/	27.38	/	/	/	/	-	-	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA					
16	-	/	/	-	-/-*	+ (6)/-*	+	+	+	+	-	/	26.75	/	/	/	22.24	/	/	/	/	-	-	/	/	/	/	/	/	/	/	/	/	/	/	/	NA						
21	-	/	/	-	-/-*	+ (1)/-*	+	+	+	+	-	/	31.36	/	/	/	28.45	/	/	/	/	-	-	/	/	/	/	/	/	/	/	/	/	/	/	/	NA						
24	-	/	/	-	-/-*	+ (2)/-*	+	+	+	+	-	/	26.72	/	/	/	27.38	/	/	/	/	-	-	/	/	/	/	/	/	/	/	/	/	/	/	/	NA						
1	-	/	/	-	-/-*	-	-	-	-	-	-	25.02	27.54	/	/	25.94	27.98	/	/	/	24.64	-	O26	+	+	2	+	CH	19.19	28.02	/	/	/	20.73	36.53	/	/	/	17.85	/	O26	+	PD
6	17.41	9.90	18.34	+	/	+	+	+	+	+	+	19.38	25.44	/	/	24.67	22.09	/	/	/	21.27	-	O26	+	+	1	+	CCA	17.04	26.10	/	/	/	18.23	24.41	/	/	/	18.18	/	O26	+	PA
11	19.39	19.92	20.30	+	/	+	+	+	+	+	+	23.80	26.69	/	/	25.30	27.50	/	/	/	25.94	-	O26	+	+	1	+	CH	11.25	32.77	/	/	/	10.62	25.30	/	/	/	17.25	/	O26	+	PA
13	-	/	/	-	-/-*	+ (5)/-*	+	+	+	+	-	20.30	25.46	/	/	23.90	25.46	/	/	/	21.86	-	O26	+	+	1	+	CCA	19.50	25.45	/	/	/	20.64	25.49	/	/	/	19.68	/	O26	+	PD
18	16.52	17.19	17.79	+	/	+	+	+	+	+	+	23.87	26.53	/	/	23.96	27.77	/	/	/	25.44	-	O26	+	+	1	+	CH	16.11	22.34	/	/	/	17.04	22.01	/	/	/	17.58	/	O26	+	PA
20	11.06	18.74	19.26	+	/	+	+	+	+	+	+	24.00	25.68	/	/	24.45	27.64	/	/	/	25.85	-	O26	+	+	1	+	CCA	18.43	26.52	/	/	/	19.69	22.68	/	/	/	18.41	/	O26	+	PA
22	-	/	/	-	-/-*	+ (3)/-*	+	+	+	+	-	26.27	26.56	/	/	28.41	26.08	/	/	/	27.35	-	O26	+	+	1	+	CCA	14.83	19.53	/	/	/	16.03	23.10	/	/	/	18.19	/	O26	+	PD
23	19.90	21.16	21.93	+	/	+	+	+	+	+	+	22.74	25.63	/	/	22.78	27.41	/	/	/	25.46	-	O26	+	+	1	+	CH	20.72	28.16	/	/	/	22.28	24.75	/	/	/	19.84	/	O26	+	PA
3	18.91	19.21	19.89	+	/	+	+	+	+	+	+	23.46	27.37	/	/	25.36	27.81	/	/	/	24.51	-	O26	+	+	1	+	CH	18.74	27.24	/	/	/	19.52	28.24	/	/	/	19.68	/	O26	+	PA
4	9.03	17.02	15.36	+	/	+	+	+	+	+	+	22.26	26.72	/	/	23.61	26.19	/	/	/	22.75	-	O26	+	+	1	+	CCA	21.84	28.56	/	/	/	22.84	28.11	/	/	/	22.15	/	O26	+	PA
7	11.63	8.61	14.07	+	/	+	+	+	+	+	+	22.70	27.61	/	/	24.65	25.96	/	/	/	22.52	-	O26	+	+	1	+	CCA	20.43	27.23	/	/	/	21.97	24.65	/	/	/	19.16	/	O26	+	PA
8	16.94	17.50	18.07	+	/	+	+	+	+	+	+	23.63	27.47	/	/	25.48	27.41	/	/	/	23.74	-	O26	+	+	1	+	CH	18.69	26.80	/	/	/	19.82	23.49	/	/	/	17.95	/	O26	+	PA
14	18.45	18.12	18.74	+	/	+	+	+	+	+	+	19.71	25.80	/	/	22.53	26.10	/	/	/	21.63	-	O26	+	+	1	+	CH	17.34	25.23	/	/	/	17.83	25.34	/	/	/	19.28	/	O26	+	PA
15	18.07	17.55	18.30	+	/	+	+	+	+	+	+	22.36	27.69	/	/	25.00	25.36	/	/	/	21.52	-	O26	+	+	1	+	CCA	17.78	27.43	/	/	/	18.58	24.17	/	/	/	17.82	/	O26	+	PA
17	11.00	10.63	17.43	+	/	+	+	+	+	+	+	22.54	27.39	/	/	23.46	27.35	/	/	/	22.39	-	O26	+	+	1	+	CCA	19.40	31.62	/	/	/	21.21	23.04	/	/	/	17.69	/	O26	+	PA
19	17.76	18.01	18.55	+	/	+	+	+	+	+	+	21.25	26.35	/	/	22.84	27.01	/	/	/	22.46	-	O26	+	+	1	+	CCA	18.80	31.17	/	/	/	20.98	22.60	/	/	/	17.28	/	O26	+	PA

* second test

()

number of typical colonies on the plate

Collaborator: C

Aerobic mesophilic flora: 20000 CFU/g

N°Sample	Reference Method ISO/TS 13136									Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																					Direct streaking final result	Final result	Agreement									
										PCR Result										Confirmation																						
	ADRIA internal method					Direct Streaking					E. coli O157:H7 and STEC Screening					E. coli STEC Identification					PCR on colonies					E. coli O157:H7 and STEC Screening					E. coli STEC Identification											
	PCR results			Final PCR Result	Confirmation		Final confirmation Result		Final Result	E. coli O157:H7 and STEC Screening										CCA	CH-STEC	Number of colonies tested	Latex O26	Plate	E. coli O157:H7 and STEC Screening					E. coli STEC Identification												
	stx	eae	serogroup		Direct streaking	IMS CH-STEC	IMS CT-RMAC	Latex O26		stx	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121					stx	IPC	O103	O111	O145	O26	O45/O121											
2	37.21	33.94	/	-	-	-	-	/	-	28.45	/	/	/	/	27.01	/	/	/	/	-	-	-	-	/	/	/	/	/	/	/	/	/	/	/	/	NA						
5	34.06	30.24	32.40	+	-	-	-	/	-	27.40	/	/	/	/	26.72	/	/	/	30.92	/	-	-	-	-	/	/	/	/	/	/	/	/	/	/	NA							
9	32.12	30.14	32.32	+	-	-	-	/	-	27.60	/	/	/	/	27.36	/	/	/	/	-	-	-	-	-	/	/	/	/	/	/	/	/	/	/	NA							
10	33.07	30.55	33.67	+	-	-	-	/	-	27.73	/	/	/	/	27.53	/	/	/	/	-	-	-	-	-	/	/	/	/	/	/	/	/	/	/	NA							
12	32.64	31.50	33.81	+	-	-	-	/	-	27.53	/	/	/	/	25.43	/	/	/	/	-	-	-	-	-	/	/	/	/	/	/	/	/	/	/	NA							
16	36.82	34.31	/	-	-	-	-	/	-	28.02	/	/	/	/	28.41	/	/	/	/	-	-	-	-	-	/	/	/	/	/	/	/	/	/	/	NA							
21	35.53	32.92	35.03	+	-	-	-	/	-	27.80	/	/	/	/	25.54	/	/	/	/	-	-	-	-	-	/	/	/	/	/	/	/	/	/	/	NA							
24	33.12	31.21	33.12	+	-	-	-	/	-	28.36	/	/	/	/	27.92	/	/	/	/	-	-	-	-	-	/	/	/	/	/	/	/	/	/	/	NA							
1	22.54	22.69	24.18	+	+	+	+	+	+	28.21	27.29	/	/	/	30.13	26.98	/	/	/	27.94	/	O26	+	+	+	16.9	29.03	/	/	18.79	21.21	/	/	16.17	/	O26	+	PA				
6	22.75	22.09	23.56	+	+	+	+	+	+	24.05	27.34	/	/	/	26.44	25.97	/	/	/	23.83	/	O26	+	+	+	15.59	30.25	/	/	16.88	22.29	/	/	15.86	/	O26	+	PA				
11	22.57	21.65	23.47	+	+	+	+	+	+	28.29	26.81	/	/	/	30.09	26.38	/	/	/	28.35	/	O26	+	+	+	18.33	28.79	/	/	19.9	22.13	/	/	17.14	/	O26	+	PA				
13	23.64	22.94	25.31	+	+	+	+	+	+	24.71	27.39	/	/	/	26.66	25.03	/	/	/	22.72	/	O26	+	+	+	17.56	31.39	/	/	19.16	21.8	/	/	16.87	/	O26	+	PA				
18	23.23	22.24	23.17	+	+	+	+	+	+	31.95	28.22	/	/	/	33.39	26.88	/	/	/	31.08	/	O26	+	+	+	17.36	29.1	/	/	17.96	23.65	/	/	16.69	/	O26	+	PA				
20	22.79	21.85	23.68	+	+	+	+	+	+	27.82	27.34	/	/	/	28.76	26.92	34.53	/	/	27.77	/	O26/O103	+	+	+	16.55	26.54	/	/	18.35	23.61	/	/	16.67	/	O26	+	PA				
22	35.53	32.44	36.21	+	+	+	+	+	+	25.26	26.69	/	/	/	27.25	28.03	/	/	/	27.28	/	O26	+	+	+	18.4	28.41	/	/	19.74	23.26	/	/	17.37	/	O26	+	PA				
23	26.05	24.68	26.52	+	+	+	+	+	+	27.64	27.21	/	/	/	28.59	27.80	39.41	/	/	27.37	/	O26/O103	+	+	+	18.19	35.76	/	/	19.57	23.39	/	/	17.18	/	O26	+	PA				
3	18.51	20.24	20.66	+	+	+	+	+	+	20.79	26.16	/	/	/	22.87	25.80	/	/	/	21.49	/	O26	+	+	+	17.29	26.04	/	/	19.42	23.14	/	/	17.19	/	O26	+	PA				
4	20.41	20.85	21.19	+	+	+	+	+	+	21.39	25.94	/	/	/	23.01	26.51	/	/	/	21.79	/	O26	+	+	+	16.24	30.23	/	/	17.9	22.18	/	/	16.56	/	O26	+	PA				
7	20.13	20.06	21.29	+	+	+	+	+	+	21.57	26.15	/	/	/	23.63	25.74	/	/	/	21.65	/	O26	+	+	+	16.18	25.84	/	/	17.73	22.45	/	/	16.14	/	O26	+	PA				
8	20.61	20.48	20.72	+	+	+	+	+	+	20.71	26.65	/	/	/	22.79	27.11	/	/	/	21.53	/	O26	+	+	+	17.25	28.26	/	/	19.08	25.65	/	/	17.42	/	O26	+	PA				
14	21.22	21.57	22.88	+	+	+	+	+	+	21.76	26.36	/	/	/	23.66	27.14	/	/	/	21.63	/	O26	+	+	+	18	28.37	/	/	19.25	23.22	/	/	17.22	/	O26	+	PA				
15	21.25	22.16	22.49	+	+	+	+	+	+	20.98	27.37	/	/	/	23.12	26.																										

Collaborator : D

Aerobic mesophilic flora: 2900 CFU/g

<<<<<	Reference Method ISO/TS 13136										Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																		Final result Agreement															
											PCR Result								Confirmation																									
	ADRIA internal method				Direct Streaking								Confirmation				Direct Streaking				Direct Streaking																							
	PCR results		Final PCR Result	Confirmation				Final confirmation Result	Final Result				E. coli O157:H7 and STEC Screening				E. coli STEC Identification				PCR on colonies																							
	stx	eae		sero-group	Final PCR Result	Direct streaking	IMS CH-STEC	IMS CT-RMAC	Latex O26	PCR (optional)	Final confirmation Result	Final Result	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Final PCR result	CCA	CH-STEC	Number of colonies tested	Latex O26	Plate	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Direct streaking final result	Final result Agreement		
2	-	/	/	-		-	-	/		-	-	/	28.76	/	/	/	/	27.27	/	/	/	32.98	/	-	-	-	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
5	-	/	/	-		-	-	/		-	-	/	27.64	/	/	/	/	27.98	/	/	/	/	/	-	-	-	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
9	-	/	/	-		-	-	/		-	-	/	28.13	/	/	/	29.92	26.40	/	/	/	/	/	-	-	-	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
10	-	/	/	-		-	-	/		-	-	/	27.47	/	/	/	/	25.72	/	/	/	29.65	/	-	-	-	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
12	-	/	/	-		-	-	/		-	-	/	26.88	/	/	/	/	28.00	/	/	/	/	/	-	+	-	1	-	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
16	-	/	/	-		-	-	/		-	-	/	27.00	/	/	/	/	28.67	/	/	/	/	/	-	-	-	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
21	-	/	/	-		-	-	/		-	-	/	26.21	/	/	/	/	28.38	/	/	/	/	/	-	-	-	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
24	31.27	31.20	32.04	+		-	-	/		-	-	/	27.54	/	/	/	/	29.09	/	/	/	/	/	-	-	-	0	/	/	/	/	/	/	/	/	/	/	/	/	/	NA			
1	27.40	27.48	28.39	+		+	+	+		+	+	/	27.40	/	/	/	/	27.14	/	/	/	/	/	-	-	-	0	/	/	/	/	/	/	/	/	/	/	/	/	/	ND			
6	-	/	/	-		+	+	+	+	+	+	-	20.09	25.96	/	/	/	22.36	27.97	/	/	/	26.28	/	O26	+	+	1	+	CH	19.11	24.24	/	/	19.55	22.08	/	/	/	18.54	/	O26	+	PD
11	-	/	/	-		-	-	/		-	-	/	22.54	27.16	/	/	/	24.71	27.46	/	/	/	24.30	/	O26	+	+	1	+	CH	19.02	25.20	/	/	20.91	27.79	/	/	/	16.69	/	O26	+	PD
13	30.90	31.89	30.42	+		+	+	+		+	+	+	24.22	26.45	/	/	/	23.53	26.83	/	/	/	25.74	/	O26	+	+	1	+	CH	21.08	26.19	/	/	22.80	25.05	/	/	/	20.63	/	O26	+	PA
18	26.17	28.54	29.29	+		+	+	+		+	+	+	26.73	/	/	/	/	28.93	/	/	/	/	/	-	-	-	0	/	/	/	/	/	/	/	/	/	/	/	/	/	ND			
20	20.51	20.64	21.69	+		+	+	+		+	+	+	24.55	27.54	/	/	/	26.52	25.91	/	/	/	23.62	/	O26	+	+	1	+	CH	26.31	28.01	/	/	26.70	26.76	/	/	/	20.89	/	O26	+	PA
22	10.50	16.95	17.57	+		+	+	+		+	+	+	27.22	27.17	/	/	/	28.40	28.12	/	/	/	30.72	/	O26	+	+	1	+	CH	19.29	22.51	/	/	18.56	26.41	/	/	/	24.33	/	O26	+	PA
23	19.61	20.67	21.38	+		+	+	+		+	+	+	26.27	27.52	/	/	/	27.58	28.12	/	/	/	27.00	/	O26	+	+	1	+	CH	18.42	24.29	/	/	19.90	28.40	/	/	/	25.28	/	O26	+	PA
3	22.73	24.01	25.03	+		+	+	+		+	+	+	21.65	26.93	/	/	/	24.06	26.33	/	/	/	23.23	/	O26	+	+	1	+	CH	19.95	25.50	/	/	21.69	25.44	/	/	/	20.20	/	+	PA	
4	24.84	23.45	24.20	+		+	+	+		+	+	+	20.85	26.19	/	/	/	22.64	26.39	/	/	/	23.51	/	O26	+	+	1	+	CH	21.14	25.99	/	/	22.38	24.48	/	/	/	20.32	/	O26	+	PA
7	26.52	27.08	28.02	+		+	+	+		+	+	+	22.48	26.59	/	/	/	24.37	27.82	/	/	/	25.01	/	O26	+	+	1	+	CH	17.90	25.25	/	/	20.47	23.83	/	/	/	18.99	/	O26	+	PA
8	24.66	26.37	27.13	+		+	+	+		+	+	+	23.39	27.28	/	/	/	25.48	26.15	/	/	/	19.76	/	O26	+	+	1	+	CH	19.35	25.22	/	/	21.57	33.88	/	/	/	21.53	/	O26	+	PA
14	21.53	22.77	23.63	+		+	+	+		+	+	+	23.17	27.11	/	/	/	25.22	27.61	/	/	/	23.11	/	O26	+	+	1	+	CH	20.22	26.09	/	/	22.69	24.15	/	/	/	19.77	/	O26	+	PA
15	26.45	27.23																																										

Collaborator: E

Aerobic mesophilic flora: 2E+07 CFU/g

N° Sample	Reference Method ISO/TS 13136										Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																				Direct streaking final result	Final result	Agreement												
											PCR Result										Confirmation																								
	ADRIA internal method										Direct Streaking										PCR on colonies																								
	PCR results			Final PCR Result	Confirmation			E. coli O157:H7 and STEC Screening			E. coli STEC Identification			E. coli O157:H7 and STEC Screening			E. coli STEC Identification			CCA	CH-r STEC	Number of colonies tested	Latex O26	Plate	E. coli O157:H7 and STEC Screening			E. coli STEC Identification																	
	stx	eae	sero-group		Direct streaking	IMS CH-STECK	IMS CT-RMAC	Latex O26	PCR (optional)	Final confirmation Result	stx	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Final PCR result					stx	IPC	O103	O111	O145	O26	O45/O121											
2	-	/	/	-		-	-	/		-	/	27.05	/	/	/	/	27.94	/	/	/	/	/	/	-	-			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
5	-	/	/	-	-	-	schw +	+		+	-	26.53	/	/	/	49.74	26.44	/	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
9	39.85	32.65	36.16	+	-	schw +	schw +	+		+	+	27.76	/	/	/	27.65	/	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	ND	
10	38.36	33.73	35.71	+	-	-	-	-	/	-	-	27.00	/	/	/	27.51	/	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA	
12	-	/	/	-		-	-	-	/	-	-	27.00	/	/	/	27.61	/	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA	
16	-	/	/	-	-	+	+	+		+	-	27.83	/	/	/	28.06	/	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
21	-	/	/	-	-	schw +	-	+		+	-	27.28	/	/	/	27.76	/	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
24	-	/	/	-	-	schw +	-	+		+	-	27.32	/	/	/	27.50	/	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
1	13.49	19.06	21.15	+		+	+	+		+	+	20.21	26.87	/	/	22.18	27.19	/	/	/	21.53	/	O26	+	+	1	+	CH	22.12	27.16	/	/	23.27	27.39	/	/	/	22.28	/	O26	+	PA			
6	-	/	/	-		+	+	+		+	-	21.27	26.46	/	/	22.91	26.58	/	/	/	22.17	/	O26	+	+	1	+	CH	20.34	26.60	/	/	21.44	27.14	/	/	/	20.84	/	O26	+	PD			
11	25.32	25.62	27.06	+		+	+	+		+	+	21.77	26.67	/	/	22.83	26.02	/	/	/	21.60	/	O26	+	+	1	+	CH	21.63	27.15	/	/	23.71	26.82	/	/	/	22.11	/	O26	+	PA			
13	18.10	19.16	19.08	+		+	+	+		+	+	/	26.53	/	/	/	27.70	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	/	/	/	/	/	ND			
18	18.67	19.59	20.34	+		+	+	+		+	+	/	27.46	/	/	/	27.61	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	/	/	/	/	ND				
20	35.11	31.74	/	-		+	+	+		+	-	20.25	26.53	/	/	21.52	25.71	/	/	/	20.61	/	O26	+	+	1	+	CH	19.48	25.60	/	/	19.84	26.59	/	/	/	20.35	/	O26	+	PD			
22	18.06	20.20	19.42	+		+	+	+		+	+	19.90	26.76	/	/	21.67	25.22	/	/	/	20.41	/	O26	+	+	1	+	CH	20.21	26.66	/	/	21.55	25.55	/	/	/	20.33	/	O26	+	PA			
23	-	/	/	-		+	+	+		+	-	21.71	26.77	/	/	22.26	26.53	/	/	/	21.39	/	O26	+	+	1	+	CH	20.20	27.33	/	/	21.08	26.55	/	/	/	21.72	/	O26	+	PD			
3	22.38	22.67	23.66	+		+	+	+		+	+	19.34	26.85	/	/	20.22	25.42	/	/	/	20.25	/	O26	+	+	1	+	CH	21.53	26.91	/	/	19.95	28.16	/	/	/	36.61	23.24	/	O26/O145	+	PA		
4	17.29	17.63	18.29	+		+	+	+		+	+	20.25	25.92	/	/	20.97	25.80	/	/	/	20.66	/	O26	+	+	1	+	CH	21.33	26.57	/	/	20.32	27.38	/	/	/	21.61	/	O26	+	PA			
7	17.17	18.31	18.51	+		+	+	+		+	+	20.25	26.83	/	/	21.53	26.39	/	/	/	20.62	/	O26	+	+	1	+	CH	20.37	26.75	/	/	21.77	26.37	/	/	/	20.60	/	O26	+	PA			
8	12.26	17.23	17.40	+		+	+	+		+	+	18.71	26.09	/	/	18.87	26.28	/	/	/	20.19	/	O26	+	+	1	+	CH	20.50	26.78	/	/	22.26	26.54	/	/	/	20.83	/	O26	+	PA			
14	20.66	21.12	22.53	+</																																									

Collaborator : F

Aerobic mesophilic flora: 50000 CFU/g

N° Sample	Reference Method ISO/TS 13136										Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																		Final result	Agreement																																							
											PCR Result								Confirmation																																																		
	ADRIA internal method				Direct Streaking				E. coli O157:H7 and STEC Screening				E. coli STEC Identification				Direct Streaking				PCR on colonies								PCR on colonies		E. coli STEC Identification																																						
	PCR results		Final PCR Result	Direct streaking	IMS CH-STECK	IMS CT-RMAC	Latex O26	PCR (optional)	Final confirmation Result	Final Result	eae		IPC		O157:H7 Target 1		O157:H7 Target 2		stx		IPC		O103		O111		O145		O26		O45/O121		Final PCR result	CCA	CH-STECK	Number of colonies tested	Latex O26	Plate	eae		IPC		O157:H7 Target 1		O157:H7 Target 2		stx		IPC		O103		O111		O145		O26		O45/O121										
	stx	eae	serogroup								eae		IPC		O157:H7 Target 1		O157:H7 Target 2		stx		IPC		O103		O111		O145		O26		O45/O121																																						
2	-	/	/	-	-	-	/	-	-	/	27.94	/	/	/	/	29.90	/	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	-	NA																																	
5	-	/	/	-	-	-	/	-	-	/	28.01	/	/	/	/	27.81	/	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	NA																																		
9	-	/	/	-	-	-	/	-	-	/	28.15	/	/	/	/	28.92	/	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	NA																																		
10	-	/	/	-	-	-	/	-	-	/	27.9	/	/	/	/	27.73	/	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	NA																																		
12	-	/	/	-	-	-	/	-	-	/	27.8	/	/	/	/	28.46	/	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	NA																																		
16	-	/	/	-	-	-	/	-	-	/	28.28	/	/	/	/	27.77	/	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	NA																																		
21	-	/	/	-	-	-	/	-	-	/	28.33	/	/	/	/	29.85	/	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	NA																																		
24	-	/	/	-	-	-	/	-	-	/	27.62	/	/	/	/	27.87	/	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	NA																																		
1	25.01	25.28	25.82	+				+	+	+	+ +	/	28.3	/	/	/	28.03	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	ND																																			
6	-	/	/	-				+	+	+	+ + +	-	27.51	28.09	/	/	30.46	27.53	/	/	/	28.16	/	O26	+	+	1	+	STECK	18.34	31.49	/	/	20.44	24.08	/	/	18.15	/	O26	+	PD																											
11	22.93	22.54	23.26	+				+	+	+	+ +	26.18	27.59	/	/	28.69	29.76	/	/	28.18	/	O26	+	+	1	+	STECK	19.49	28.71	/	/	20.88	24.36	/	/	18.86	/	O26	+	PA																													
13	25.33	26.08	26.50	+				+	+	+	+ +	27.4	28.16	/	/	31.21	27.87	/	/	28.23	/	O26	+	+	1	+	STECK	19.33	28.16	/	/	20.95	25.03	/	/	18.20	/	O26	+	PA																													
18	-	/	/	-				-	-	/	-	26.34	27.48	/	/	30.19	27.61	/	/	27.53	/	O26	+	+	1	+	STECK	18.91	26.65	/	/	20.53	25.97	/	/	18.96	/	O26	+	PD																													
20	25.31	25.35	25.87	+				+	+	+	+ +	26.16	27.76	/	/	28.55	29.18	/	/	27.80	/	O26	+	+	1	+	STECK	18.33	28.11	/	/	20.16	26.26	/	/	18.89	/	O26	+	PA																													
22	26.36	29.99	30.87	+				+	+	+	+ +	24.76	27.96	/	/	27.29	28.43	/	/	25.77	/	O26	+	+	1	+	STECK	17.75	28.78	/	/	19.84	26.83	/	/	19.31	/	O26	+	PA																													
23	-	/	/	-				-	-	/	-	22.44	27.86	/	/	24.94	29.40	/	/	23.96	/	O26	+	+	1	+	STECK	18.83	29.86	/	/	20.08	26.08	/	/	19.50	/	O26	+	PD																													
3	23.24	23.97	24.41	+				+	+	+	+ +	24.76	27.98	/	/	28.44	27.47	/	/	25.66	/	O26	+	+	1	+	STECK	19.13	28.21	/	/	21.59	24.53	/	/	19.14	/	O26	+	PA																													
4	-	/	/	-				+	+	+	+ + +	-	25.46	27.94	/	/	28.21	27.93	/	/	25.57	/	O26	+	+	1	+	STECK	18.43	31.99	/	/	20.18	24.78	/	/	18.60	/	O26	+	PD																												
7	23.11	22.95	23.67	+				+	+	+	+ +	24.4	27.8	/	/	27.16	27.17	/	/	24.35	/	O26	+	+	1	+	STECK	18.5	31.37	/	/	20.32	25.53	/	/	18.22	/	O26	+	PA																													
8	21.73	21.34	22.15	+				+	+	+	+ +	24.32	27.93	/	/	26.79	26.70	/	/	23.53	/	O26	+	+	1</td																																												

Collaborator: G1

Aerobic mesophilic flora: 550 CFU/g

Collaborator: G2

Aerobic mesophilic flora: 550 CFU/g

Collaborator: H1

Aerobic mesophilic flora: 5500 CFU/g

NºSample	Reference Method ISO/TS 13136										Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																		Final result	Agreement											
											PCR Result								Confirmation																						
	ADRIA internal method																			Direct Streaking																					
	PCR results		Final PCR Result	Confirmation				Final confirmation Result	Final Result	E. coli O157:H7 and STEC Screening								E. coli STEC Identification								PCR on colonies															
	stx	eae	serogroup	Direct streaking	IMS CH-STECK	IMS CT-RMAC	Latex O26	PCR (optional)		eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Final PCR result	CCA	CH-STECK	Number of colonies tested	Latex O26	Plate	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121				
2	30.28	30.94	34.84	+	-	-	/	/	-	/	27.84	/	/	/	28.32	/	/	/	-	/	-	-	-	-	/	/	/	/	/	/	/	/	/	/	/	NA					
5	-	/	/	-	-	-	/	/	-	/	27.98	/	/	/	28.32	/	/	/	/	/	-	-	-	-	/	/	/	/	/	/	/	/	/	/	/	NA					
9	35.18	29.53	32.15	+	-	-	-	/	-	/	28.28	/	/	/	28.35	/	/	/	/	/	-	-	-	-	/	/	/	/	/	/	/	/	/	/	NA						
10	-	/	/	-	-	-	/	/	-	/	28.15	/	/	/	28.57	/	/	/	/	/	-	-	-	-	/	/	/	/	/	/	/	/	/	/	NA						
12	31.72	29.08	32.13	+	-	-	-	/	-	/	27.74	/	/	/	27.44	/	/	/	/	/	-	-	-	-	/	/	/	/	/	/	/	/	/	NA							
16	32.46	29.91	32.68	+	-	-	-	/	-	/	28.52	/	/	/	28.72	/	/	/	/	/	-	-	-	-	/	/	/	/	/	/	/	/	/	NA							
21	-	/	/	-	-	-	/	/	-	/	28.20	/	/	/	28.69	/	/	/	/	/	-	-	-	-	/	/	/	/	/	/	/	/	/	NA							
24	-	/	/	-	-	-	/	/	-	/	28.20	/	/	/	28.18	/	/	/	/	/	-	-	-	-	+	/	/	/	/	/	/	/	/	NA							
1	-	/	/	-	-	/	/	-	-	/	27.91	28.31	/	/	30.27	26.91	/	/	/	27.18	/	O26	+	+	1	+	CCA	23.1	29.53	-	-	25.07	27.71	-	-	-	23.61	-	O26	+	PD
6	20.81	21.30	21.71	+	+	+	+	+	+	/	28.29	/	/	-	27.61	/	/	/	/	-	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	ND						
11	19.47	19.04	19.43	+	+	+	+	+	+	/	27.72	/	/	-	27.99	/	/	/	/	-	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	ND						
13	19.74	21.18	21.43	+	+	+	+	+	+	/	23.87	26.91	/	/	23.87	26.68	/	/	/	22.89	/	O26	+	+	1	+	CCA	26.67	26.67	/	/	21.76	26.98	/	/	/	21.34	/	O26	+	PA
18	22.92	23.78	24.67	+	+	+	+	+	+	/	25.44	27.72	/	/	25.44	27.50	/	/	/	25.35	/	O26	+	+	1	+	CCA	28.9	28.9	/	/	24.27	21.12	/	/	/	21.12	/	O26	+	PA
20	20.76	19.45	20.24	+	+	+	+	+	+	/	24.10	26.91	/	/	24.10	26.92	/	/	/	23.89	/	O26	+	+	1	+	CCA	20.86	35.16	/	/	21.98	26.41	/	/	/	21.65	/	O26	+	PA
22	18.64	19.30	19.68	+	+	+	+	+	+	/	27.16	27.16	/	/	27.16	27.92	/	/	/	25.54	/	O26	+	+	1	+	CCA	20.86	34.37	/	/	21.69	25.35	/	/	/	20.56	/	O26	+	PA
23	23.20	22.40	23.07	+	+	+	+	+	+	/	26.33	27.91	/	/	26.33	27.63	/	/	/	23.72	/	O26	+	+	1	+	CCA	22.1	28.3	/	/	24.12	26.44	/	/	/	21.96	/	O26	+	PA
3	10.26	17.39	17.52	+	+	+	+	+	+	/	23.95	27.65	/	/	26.22	27.61	/	/	/	24.53	/	O26	+	+	1	+	CCA	26.62	26.62	/	/	23.44	25.91	/	/	/	20.84	/	O26	+	PA
4	16.76	17.76	18.02	+	+	+	+	+	+	/	24.78	27.81	/	/	27.11	26.91	/	/	/	24.71	/	O26	+	+	5	+	CCA	20.74	34.74	/	/	22.3	26.17	/	/	/	19.82	/	O26	+	PA
7	17.45	17.52	17.96	+	+	+	+	+	+	/	23.72	27.99	/	/	25.93	27.37	/	/	/	23.30	/	O26	+	+	1	+	CCA	29.17	29.17	/	/	20.56	25.07	/	/	/	19.29	/	O26	+	PA
8	19.46	18.61	19.12	+	+	+	+	+	+	/	23.21	27.85	/	/	25.60	27.47	/	/	/	23.76	/	O26	+	+	1	+	CCA	27.75	27.75	/	/	23.25	25.93	/	/	/	21.09	/	O26	+	PA
14	8.41	17.24	17.53	+	+	+	+	+	+	/	21.30	26.71	/	/	21.30	25.61	/	/	/	21.09	/	O26	+	+	1	+	CCA	26.96	26.69	/	/	22.53	26.76	/	/	/	21.18	/	O26	+	PA
15	19.10	19.01	19.24	+	+	+	+	+	+	/	27.72	27.72	/	/	27.72	27.79	/	/	/	22.00	/	O26	+	+	1	+	CCA	26.11	26.11	/	/	22.69	24.67	/	/	/	19.42	/	O26	+	PA
17	16.95	17.52	17.77	+	+	+	+	+	+	/	26.90	26.90	/	/	26.90	26.48	/	/	/	21.81	/	O26	+	+	1	+	CCA	27.88	27.88												

Collaborator: H2

Aerobic mesophilic flora: 6000 CFU/g

Nº Sample	Reference Method ISO/TS 13136										Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																		Direct streaking final result	Final result	Agreement											
											PCR Result								Confirmation																							
	ADRIA internal method																			Direct Streaking								PCR on colonies														
	PCR results			Final PCR Result	Confirmation				Final confirmation Result	Final Result	E. coli O157:H7 and STEC Screening								E. coli STEC Identification								E. coli O157:H7 and STEC Screening															
	stx	eae	serogroup		Direct streaking	IMS CH-STECK	IMS CT-RMAC	Latex O26			eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Final PCR result	CCA	CH-STECK	Number of colonies tested	Latex O26	Plate	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121				
25	-	/	/	-	-	-	-	/	-	-	26.56	-	-	-	27.41	/	/	/	/	/	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
28	-	/	/	-	-	-	-	/	-	-	27.64	/	/	/	27.78	/	/	/	/	/	-	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
31	-	/	/	-	-	-	-	/	-	-	28.29	/	/	/	28.76	/	/	/	/	/	-	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
34	-	/	/	-	-	-	-	/	-	-	28.01	/	/	/	27.81	/	/	/	/	/	-	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
38	-	/	/	-	-	-	-	/	-	-	27.90	/	/	/	28.27	/	/	/	/	/	-	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
42	-	/	/	-	(+)	(+)	(+)	(+)	(+)	(+)	26.68	/	/	/	28.66	/	/	/	/	/	-	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
46	-	/	/	-	-	-	-	/	-	-	27.58	/	/	/	28.25	/	/	/	/	/	-	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
47	-	/	/	-	-	-	-	/	-	-	28.12	/	/	/	28.39	/	/	/	/	/	-	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
26	20.20	19.63	19.88	+	+	+	+	+	+	-	27.42	/	/	/	28.63	/	/	/	/	/	-	-	-	-	CCA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	ND
29	-	/	/	-	-	-	-	/	-	-	21.07	25.11	/	/	21.07	27.72	/	/	/	22.79	/	026	+	+	1	+	CCA	22.63	31.15	/	/	24.08	26.16	/	/	20.81	/	026	+	PD		
32	32.71	30.59	32.54	+	-	-	-	/	-	-	23.70	26.97	/	/	25.27	28.13	/	/	/	24.33	/	026	+	+	1	+	CCA	21.21	26.55	/	/	23.23	27.52	/	/	22.89	/	026	+	PD		
35	10.50	20.60	20.99	+	+	+	+	+	+	+	25.37	27.45	/	/	27.54	28.24	/	/	/	26.00	/	026	+	+	1	+	CCA	20.85	26.76	/	/	22.46	27.29	/	/	22.39	/	026	+	PA		
37	20.27	20.96	21.32	+	+	+	+	+	+	+	25.82	27.43	/	/	27.83	27.73	/	/	/	26.31	/	026	+	+	1	+	CCA	22.08	27.69	/	/	23.92	27.41	/	/	22.65	/	026	+	PA		
41	19.53	20.46	21.08	+	+	+	+	+	+	+	24.46	27.62	/	/	26.61	27.80	/	/	/	24.39	/	026	+	+	2	+	CCA	19.69	36.74	/	/	21.14	27.59	/	/	20.56	/	026	+	PA		
43	7.87	17.02	17.56	+	+	+	+	+	+	+	23.71	26.36	/	/	24.58	28.60	/	/	/	25.83	/	026	+	+	1	+	CCA	20.6	34.68	/	/	21.73	26.37	/	/	21.4	/	026	+	PA		
45	17.10	17.11	17.42	+	+	+	+	+	+	+	21.16	25.58	/	/	23.42	26.96	/	/	/	23.37	/	026	+	+	1	+	CCA	20.63	30.59	/	/	22.13	26.83	/	/	20.89	/	026	+	PA		
27	21.19	20.38	20.43	+	+	+	+	+	+	+	20.18	26.79	/	/	22.15	26.25	/	/	/	20.87	/	026	+	+	1	+	CCA	24.48	20.71	/	/	21.84	26.25	/	/	21.1	/	026	+	PA		
30	13.42	18.27	18.35	+	+	+	+	+	+	+	22.08	28.07	/	/	23.76	26.26	/	/	/	20.67	/	026	+	+	1	+	CCA	23.68	28.89	/	/	25.02	27.4	/	/	23.2	/	026	+	PA		
33	19.93	21.13	21.21	+	+	+	+	+	+	+	21.29	27.83	/	/	23.35	27.61	/	/	/	20.93	/	026	+	+	1	+	CCA	23.68	28.32	/	/	23.5	26.71	/	/	21.97	/	026	+	PA		
36	20.29	20.25	20.40	+	+	+	+	+	+	+	20.42	36.80	/	/	22.31	26.43	/	/	/	20.85	/	026	+	+	1	+	CCA	21.26	27.2	/	/	22.66	26.93	/	/	21.55	/	026	+	PA		
39	21.10	21.40	21.69	+	+	+	+	+	+	+	20.20	26.68	/	/	23.01	26.87	/	/	/	20.83	/	026	+	+	1	+	CCA	21.61	27.57	/	/	23.32	28.07	/	/	22.2	/					

Collaborator : I1

Aerobic mesophilic flora: 190000 CFU/g

N°Sample	Reference Method ISO/TS 13136									Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																		Direct streaking final result	Final result	Agreement																
										PCR Result								Confirmation																												
	ADRIA internal method									Direct Streaking								PCR on colonies																												
	PCR results			Final PCR Result	Confirmation				E. coli O157:H7 and STEC Screening									E. coli STEC Identification								E. coli O157:H7 and STEC Screening				E. coli STEC Identification																
	stx	eae	sero-group		Direct streaking	IMS CH-STECK	IMS CT-RMAC	Latex O26	PCR (optional)	Final confirmation Result	Final Result	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Final PCR result	CCA	CH-STECK	Number of colonies tested	Latex O26	Plate	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121							
2	-	/	/	-		-	-	/		-	/	(+) 28.35	/	/	/	/	(+) 28.58	/	/	/	/	/	-	(-)	(-)				/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA
5	33.16	29.71	29.42	+		-	-	/		-	-	(+) 28.49	/	/	/	/	(+) 27.73	/	/	/	/	/	-	(-)	(-)				/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA	
9	33.92	29.47	29.53	+		-	-	/		-	-	(+) 28.31	/	/	/	/	(+) 28.68	/	/	/	/	/	-	(-)	(-)				/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
10	34.42	30.96	31.96	+		-	-	/		-	-	(+) 28.62	/	/	/	/	(+) 27.43	/	/	/	/	/	-	(-)	(-)				/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA			
12	37.07	32.54	35.34	+		-	-	/		-	-	(+) 27.67	/	/	/	/	(+) 25.55	/	/	/	/	/	-	(-)	(-)				/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA			
16	-	/	/	-		-	-	/		-	-	(+) 26.10	/	/	/	/	(+) 25.59	/	/	/	/	/	-	(-)	(-)				/	/	/	/	/	/	/	/	/	/	/	/	/	/	NA			
21	-	/	/	-		-	-	/		-	-	(+) 27.13	/	/	/	/	(+) 27.75	/	/	/	/	/	-	(-)	(-)				/	/	/	/	/	/	/	/	/	/	/	/	/	NA				
24	-	/	/	-		+	+	+	+	+	+	(+) 27.86	/	/	/	/	(+) 27.19	/	/	/	/	/	-	(-)	(-)				/	/	/	/	/	/	/	/	/	/	/	/	NA					
1	22.69	22.73	22.74	+		+	+	(+)		+	+	(+) 24.65	(+) 27.75	/	/	(+) 27.24	(+) 28.53	/	/	/	(+) 26.52	/	O26	(+) (+)	1	(+) CCA	(+) 21.05	(+) 27.13	/	/	(+) 22.76	(+) 25.96	/	/	(+) 21.10	/	O26	+	PA							
6	19.95	20.16	20.58	+		+	+	+		+	+	(+) 25.53	(+) 28.12	/	/	(+) 27.5	(+) 27.76	/	/	/	(+) 25.14	/	O26	(+) (+)	1	(+) CCA	(+) 17.48	(+) 29.41	/	/	(+) 19.14	(+) 24.24	/	/	(+) 17.52	/	O26	+	PA							
11	20.95	19.53	19.94	+		+	+	+		+	+	(+) 25.63	(+) 26.62	/	/	(+) 25.84	(+) 27.91	/	/	/	(+) 25.79	/	O26	(+) (+)	1	(+) CCA	(+) 19.79	(+) 28.0	/	/	(+) 21.80	(+) 25.83	/	/	(+) 19.63	/	O26	+	PA							
13	-	/	/	-		-	-	/		-	-	(+) 27.30	(+) 27.21	/	/	(+) 27.75	(+) 27.36	/	/	/	(+) 27.77	/	O26	(+) (+)	1	(+) CCA	(+) 19.48	(+) 26.29	/	/	(+) 21.48	(+) 25.68	/	/	(+) 20.14	/	O26	+	PD							
18	23.01	22.21	22.57	+		+	+	+		+	+	(+) 23.38	(+) 27.18	/	/	(+) 25.30	(+) 27.27	/	/	/	(+) 24.28	/	O26	(+) (+)	1	(+) CCA	(+) 21.56	(+) 27.04	/	/	(+) 23.32	(+) 26.64	/	/	(+) 21.74	/	O26	+	PA							
20	20.91	20.61	21.06	+		+	+	+		+	+	(+) 26.04	(+) 26.75	/	/	(+) 25.99	(+) 26.61	/	/	/	(+) 25.86	/	O26	(+) (+)	1	(+) CCA	(+) 20.68	(+) 27.23	/	/	(+) 22.50	(+) 25.72	/	/	(+) 20.63	/	O26	+	PA							
22	21.03	20.30	20.78	+		+	+	+		+	+	(+) 24.02	(+) 26.97	/	/	(+) 25.79	(+) 26.45	/	/	/	(+) 23.87	/	O26	(+) (+)	1	(+) CCA	(+) 20.78	(+) 26.26	/	/	(+) 22.41	(+) 26.40	/	/	(+) 21.56	/	O26	+	PA							
23	20.49	19.46	19.54	+		+	+	+		+	+	(+) 27.80	(+) 27.93	/	/	(+) 29.79	(+) 27.04	/	/	/	(+) 27.80	/	O26	(+) (+)	1	(+) CCA	(+) 20.81	(+) 27.40	/	/	(+) 22.99	(+) 26.48	/	/	(+) 21.20	/	O26	+	PA							
3	19.45	19.71	20.12	+		+	+	+		+	+	(+) 23.09	(+) 26.96	/	/	(+) 24.8	(+) 27.21	/	/	/	(+) 23.22	/	O26	(+) (+)	1	(+) CCA	(+) 18.92	(+) 28.09	/	/	(+) 20.06	(+) 23.66	/	/	(+) 17.63	/	O26	+	PA							
4	20.82	20.50	20.64	+		+	+	+		+	+	(+) 22.9	(+) 27.42	/	/	(+) 22.36	(+) 26.83	/	/	/	(+) 22.97	/	O26	(+) (+)	1	(+) CCA	(+) 20.75	(+) 27.11	/	/	(+) 22.85	(+) 26.14	/	/	(+) 20.85	/	O26	+	PA							
7	13.67	18.52	18.92	+		+	+	+		+	+	(+) 22.63	(+) 26.96	/	/	(+) 24.85	(+) 27.26	/	/	/	(+) 22.89	/	O26	(+) (+)	1	(+) CCA	(+) 18.71	(+) 28.58	/	/	(+) 20.58	(+) 25.20														

Collaborator : I2

Aerobic mesophilic flora: 99000 CFU/g

Nº Sample	Reference Method ISO/TS 13136									Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																Direct streaking final result	Final result	Agreement												
										PCR Result								Confirmation																						
	ADRIA internal method																		Direct Streaking																					
	PCR results			Final PCR Result	Confirmation				Final confirmation Result	E. coli O157:H7 and STEC Screening									PCR on colonies																					
	stx	eae	serogroup		Direct streaking	IMS CH-STE	IMS CT-RMAC	Latex O26		PCR (optional)	Final Result	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Final PCR result	CCA	CH-STE	Number of colonies tested	Latex O26	Plate	E. coli O157:H7 and STEC Screening	E. coli STEC Identification	O45/O121	Direct streaking final result	Final result	Agreement						
25	-	/	/	-	(-)	(-)	/	/	-	-	/	(+) 28.88	/	/	/	(+) 27.72	/	/	/	/	/	-	-	0			/	/	/	/	/	/	/	/	-	-	NA			
28	-	/	/	-	(-)	(-)	/	/	-	-	/	(+) 28.65	/	/	/	(+) 27.57	/	/	/	/	/	-	-	0			/	/	/	/	/	/	/	/	-	-	NA			
31	-	/	/	-	(-)	(-)	/	/	-	-	/	(+) 28.19	/	/	/	(+) 26.76	/	/	/	/	/	-	-	0			/	/	/	/	/	/	/	/	-	-	NA			
34	-	/	/	-	(-)	(-)	/	/	-	-	/	(+) 27.9	/	/	/	(+) 27.39	/	/	/	/	/	-	-	0			/	/	/	/	/	/	/	/	-	-	NA			
38	-	/	/	-	(-)	(-)	/	/	-	-	/	(+) 27.62	/	/	/	(+) 27.66	/	/	/	/	/	-	-	0			/	/	/	/	/	/	/	/	-	-	NA			
42	-	/	/	-	(-)	(-)	/	/	-	-	/	(+) 27.93	/	/	/	(+) 28.26	/	/	/	/	/	-	-	0			/	/	/	/	/	/	/	/	-	-	NA			
46	-	/	/	-	(-)	(-)	/	/	-	-	/	(+) 25.69	/	/	/	(+) 27.67	/	/	/	/	/	-	-	0			/	/	/	/	/	/	/	/	-	-	NA			
47	-	/	/	-	(-)	(-)	/	/	-	-	/	(+) 27.41	/	/	/	(+) 27.87	/	/	/	/	/	-	-	0			/	/	/	/	/	/	/	/	-	-	NA			
26	-	/	/	-	(-)	(-)	/	/	-	-	(+) 23.29	(+) 27.97	/	/	(+) 25.05	(+) 26.42	/	/	/	(+) 21.9	/	O26	+	+	1	+	CCA	(+) 22.33	(+) 27.38	/	/	(+) 24.01	(+) 26.48	/	/	(+) 22.07	/	O26	+	PD
29	20.58	19.18	19.48	+	(+)	(+)	(+)		+	+	(+) 23.33	(+) 27.77	/	/	(+) 25.87	(+) 25.91	/	/	/	(+) 21.66	/	O26	+	+	1	+	CCA	(+) 19.9	(+) 26.39	/	/	(+) 21.54	(+) 24.66	/	/	(+) 20.2	/	O26	+	PA
32	26.33	26.21	26.31	+	(+)	(+)	(+)		+	+	(+) 21.76	(+) 27.24	/	/	(+) 23.47	(+) 25.88	/	/	/	(+) 21.32	/	O26	+	+	1	+	CCA	(+) 20.39	(+) 26.74	/	/	(+) 22.26	(+) 26.03	/	/	(+) 20.44	/	O26	+	PA
35	19.54	18.60	18.10	+	(+)	(+)	(+)		+	+	(+) 22.75	(+) 27.41	/	/	(+) 24.91	(+) 27.01	/	/	/	(+) 23.1	/	O26	+	+	1	+	CCA	(+) 20.2	(+) 26.41	/	/	(+) 21.9	(+) 25.02	/	/	(+) 20.09	/	O26	+	PA
37	23.99	22.73	22.96	+	(+)	(+)	(+)		+	+	(+) 21.29	(+) 27.44	/	/	(+) 23.37	(+) 24.81	/	/	/	(+) 20.46	/	O26	+	+	1	+	CCA	(+) 21.98	(+) 27.35	/	/	(+) 23.49	(+) 26.77	/	/	(+) 22.12	/	O26	+	PA
41	26.28	25.46	25.60	+	(+)	(+)	(+)		+	+	(+) 21.82	(+) 27.11	/	/	(+) 23.41	(+) 26.21	/	/	/	(+) 21.36	/	O26	+	+	1	+	CCA	(+) 21.18	(+) 26.64	/	/	(+) 22.82	(+) 26.64	/	/	(+) 21.71	/	O26	+	PA
43	-	/	/	-	(+)	(+)	(+)		+	+	(+) 21.3	(+) 26.59	/	/	(+) 22.88	(+) 27.09	/	/	/	(+) 22.47	/	O26	+	+	1	+	CCA	(+) 20.56	(+) 26.34	/	/	(+) 21.81	(+) 25.84	/	/	(+) 20.81	/	O26	+	PD
45	21.26	21.54	21.71	+	(+)	(+)	(+)		+	+	(+) 19.58	(+) 26.75	/	/	(+) 20.09	(+) 26.29	/	/	/	(+) 21.43	/	O26	+	+	1	+	CCA	(+) 21.14	(+) 26.36	/	/	(+) 22.77	(+) 25.94	/	/	(+) 21.3	/	O26	+	PA
27	23.79	22.60	23.26	+	(+)	(+)	(+)		+	+	(+) 20.29	(+) 28.61	/	/	(+) 22.22	(+) 26.22	/	/	/	(+) 19.97	/	O26	+	+	1	+	CCA	(+) 21.66	(+) 27.19	/	/	(+) 23.38	(+) 26.4	/	/	(+) 21.41	/	O26	+	PA
30	15.25	18.16	18.36	+	(+)	(+)	(+)		+	+	(+) 20.78	(+) 28.01	/	/	(+) 23.13	(+) 25.52	/	/	/	(+) 20.76	/	O26	+	+	1	+	CCA	(+) 21.03	(+) 27.06	/	/	(+) 22.93	(+) 25.14	/	/	(+) 20.89	/	O26	+	PA
33	19.14	18.08	17.90	+	(+)	(+)	(+)		+	+	(+) 21	(+) 27.31	/	/	(+) 22.75	(+) 26.3	/	/	/	(+) 21.25	/	O26	+	+	1	+	CCA	(+) 20.69	(+) 26.33	/	/	(+) 22.58	(+) 25.69	/	/	(+) 20.32	/	O26	+	PA
36	21.01	21.07	22.15	+	(+)	(+)	(+)		+	+	(+) 19.62	(+) 27.08	/	/	(+) 21.47	(+) 24.02	/	/	/	(+) 19.39	/	O26	+	+	1	+	CCA	(+) 21.47	(+) 26.5	/	/	(+) 22.61	(+) 26.65	/	/	(+) 21.29	/	O26	+	PA
39	19.56	19.13	19.52	+	(+)	(+)	(+)		+	+	(+) 19.94	(+) 26.03	/	/	(+) 21.06	(+) 24.39	/	/	/	(+) 19.41	/	O26	+	+	1	+	CCA	(+) 21.16												

Collaborator : J1

Aerobic mesophilic flora: 19000 CFU/g

N°Sample	Reference Method ISO/TS 13136										Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																Final result Agreement												
											PCR Result								Confirmation																				
	ADRIA internal method																			Direct Streaking																			
	PCR results			Final PCR Result	Confirmation				E. coli O157:H7 and STEC Screening								E. coli STEC Identification								PCR on colonies														
	stx	eae	serogroup		Direct streaking	IMS CH-STEC	IMS CT-RMAC	Latex O26	PCR (optional)	Final confirmation Result	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Final PCR result	CCA	CH-STEC	Number of colonies tested	Latex O26	Plate	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Direct streaking final result
2	-	/	/	-	-	-	-	/	-	-	28.18	/	/	/	27.37	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	-	NA					
5	-	/	/	-	-	-	-	/	-	-	27.91	/	/	/	26.71	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	NA						
9	-	/	/	-	-	-	-	/	-	-	27.94	/	/	/	27.19	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	NA						
10	-	/	/	-	-	-	-	/	-	-	27.85	/	/	/	27.82	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	-	NA						
12	-	/	/	-	-	-	-	/	-	-	27.96	/	/	/	27.69	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	NA							
16	-	/	/	-	-	-	-	/	-	-	28.43	/	/	/	27.93	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	NA							
21	-	/	/	-	-	-	-	/	-	-	28.27	/	/	/	27.92	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	NA							
24	-	/	/	-	-	-	-	/	-	-	27.80	/	/	/	27.60	/	/	/	/	/	-	-	-	-	-	-	-	-	-	-	-	NA							
1	-	/	/	-	-	-	-	/	-	-	26.42	27.92	/	/	28.75	28.71	/	/	/	26.95	/	O26	+	+	1	+	CCA	22.31	26.80	/	/	24.62	25.76	/	/	21.91	/	O26	+ PD
6	-	/	/	-	-	-	-	/	-	-	24.41	27.53	/	/	27.11	27.00	/	/	/	24.24	/	O26	+	+	1	+	CCA	22.75	30.32	/	/	24.04	27.85	/	/	21.14	/	O26	+ PD
11	33.89	33.42	36.11	+	+	+	+	+	+	+	21.91	27.26	/	/	24.54	27.58	/	/	/	22.63	/	O26	+	+	1	+	CCA	23.01	29.68	/	/	24.92	28.38	/	/	22.79	/	O26	+ PA
13	20.19	20.83	21.47	+	+	+	+	+	+	+	24.89	27.99	/	/	27.43	26.89	/	/	/	24.40	/	O26	+	+	1	+	CCA	22.20	27.14	/	/	24.33	26.37	/	/	22.09	/	O26	+ PA
18	21.27	21.01	21.37	+	+	+	+	+	+	+	24.42	27.18	/	/	26.41	27.74	/	/	/	24.60	/	O26	+	+	1	+	CCA	22.87	26.79	/	/	24.33	27.03	/	/	23.42	/	O26	+ PA
20	20.84	20.40	21.34	+	+	+	+	+	+	+	22.97	27.22	/	/	25.08	27.09	/	/	/	22.98	/	O26	+	+	1	+	CHROMA	20.45	26.69	/	/	22.55	26.07	/	/	20.79	/	O26	+ PA
22	17.88	19.72	19.41	+	+	+	+	+	+	+	27.23	28.15	/	/	29.52	27.55	/	/	/	26.46	/	O26	+	+	1	+	CCA	22.10	27.07	/	/	23.92	26.04	/	/	22.12	/	O26	+ PA
23	21.01	21.92	23.05	+	+	+	+	+	+	+	27.46	27.99	/	/	30.00	27.25	/	/	/	26.87	/	O26	+	+	1	+	CCA	22.01	26.61	/	/	24.04	28.38	/	/	23.45	/	O26	+ PA
3	21.02	21.35	22.05	+	+	+	+	+	+	+	24.14	28.33	/	/	26.56	28.08	/	/	/	24.00	/	O26	+	+	1	+	CCA	21.77	27.39	/	/	22.90	26.03	/	/	21.39	/	O26	+ PA
4	21.56	21.66	21.59	+	+	+	+	+	+	+	23.64	27.92	/	/	25.96	27.75	/	/	/	23.76	/	O26	+	+	1	+	CCA	22.64	26.89	/	/	24.82	27.74	/	/	23.52	/	O26	+ PA
7	17.50	18.94	19.37	+	+	+	+	+	+	+	22.37	27.45	/	/	24.45	27.04	/	/	/	22.30	/	O26	+	+	1	+	CCA	23.47	29.79	/	/	25.35	28.01	/	/	22.95	/	O26	+ PA
8	7.79	17.06	17.89	+	+	+	+	+	+	+	22.55	27.15	/	/	25.26	28.21	/	/	/	23.51	/	O26	+	+	1	+	CCA	22.00	29.39	/	/	23.96	28.16	/	/	21.82	/	O26	+ PA
14	17.57	19.62	19.53	+	+	+	+	+	+	+	22.63	27.98	/	/	24.86	27.14	/	/	/	21.54	/	O26	+	+	1	+	CCA	21.53	27.01	/	/	23.67	26.99	/	/	21.73	/	O26	+ PA
15	19.76	18.02	18.64	+	+	+	+	+	+	+	22.55	27.77	/	/	24.86	27.92	/	/	/	22.74	/	O26	+	+	1	+	CCA	21.25	26.73	/	/	22.83	26.32	/	/	21.36	/	O26	+ PA
17	20.33	19.54	21.21	+	+	+	+	+	+	+	22.39	27.64	/	/	24.55	27.67	/	/	/	22.69	/	O26	+	+	1	+	CCA	22.13	27.52	/	/	23.97	27.09	/	/	22.13	/	O26	+ PA
19	19.15	20.10	21.24	+	+	+	+	+	+	+	22.72	27.88	/	/	25.10	25.15	/	/	/	21.56	/	O26	+	+	1	+													

Collaborator: J2

Aerobic mesophilic flora: 3800 CFU/g

Collaborator : K

Aerobic mesophilic flora: 11000 CFU/g

N°Sample	Reference Method ISO/TS 13136										Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C												Confirmation		Direct Streaking										Direct streaking final result												
											PCR Result																																				
	ADRIA internal method										E. coli O157:H7 and STEC Screening										E. coli STEC Identification										PCR on colonies																
	PCR results		Final PCR Result	Confirmation		Final confirmation Result		Final Result		E. coli O157:H7 and STEC Screening										E. coli STEC Identification										E. coli STEC Identification																	
	stx	eae		sero-group	Final PCR Result	Direct streaking	IMS CH-STEC	IMS CT-RMAC	Latex O26	PCR (optional)	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Final PCR result	CCA	CH-r STEC	Number of colonies tested	Latex O26	Plate	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Direct streaking final result	Final result	Agreement						
2	-	/	/	-		/	-	/		-	/	+	(27.5)	/	/	/	/	/	/	/	-	(-)	(-)			/	/	/	/	/	/	/	/	/	/	/	/	-	-	NA							
5	-	/	/	-		-	-	/		-	/	+	(27.7)	/	/	/	+	(27.9)	/	/	/	/	-	(-)	(-)			/	/	/	/	/	/	/	/	/	/	/	-	-	NA						
9	-	/	/	-		/	-	/		-	/	+	(27.7)	/	/	/	+	(27.9)	/	/	/	/	-	(-)	(-)			/	/	/	/	/	/	/	/	/	/	/	-	-	NA						
10	-	/	/	-		-	-	/		-	/	+	(27.7)	/	/	/	+	(27.2)	/	/	/	/	-	(-)	(-)			/	/	/	/	/	/	/	/	/	/	/	-	-	NA						
12	-	/	/	-		-	-	/		-	/	+	(27.4)	/	/	/	+	(27.4)	/	/	/	/	-	(-)	(-)			/	/	/	/	/	/	/	/	/	/	/	-	-	NA						
16	-	/	/	-		-	-	/		-	/	+	(27.8)	/	/	/	+	(27.7)	/	/	/	/	-	(-)	(-)			/	/	/	/	/	/	/	/	/	/	/	-	-	NA						
21	-	/	/	-		/	-	/		-	/	+	(27.3)	/	/	/	+	(27.2)	/	/	/	/	-	(-)	(-)			/	/	/	/	/	/	/	/	/	/	/	-	-	NA						
24	-	/	/	-		/	-	/		-	/	+	(27.6)	/	/	/	+	(28.8)	/	/	/	/	-	(-)	(-)			/	/	/	/	/	/	/	/	/	/	/	-	-	NA						
1	19.70	19.39	19.78	+		+	+	+	+	+	+	(24.0)	(26.9)	/	/	/	+	(24.4)	+	(27.2)	/	/	/	+	(25.3)	/	026	(+)	(+)	1	(+)	CH-STEC	+(21.3)	+(27.2)	/	/	+	(22.6)	+(26.5)	/	/	/	+(21.2)	/	026	+	PA
6	19.37	19.20	19.05	+		+	+	+	+	+	+	(21.8)	(27.5)	/	/	/	+	(23.0)	+	(25.7)	/	/	/	+	(21.3)	/	026	(+)	(+)	1	(+)	CH-STEC	+(21.0)	+(26.7)	/	/	+	(22.5)	+(26.4)	/	/	/	+(21.4)	/	026	+	PA
11	9.44	17.89	18.13	+		+	+	+	+	+	+	(19.4)	(26.7)	/	/	/	+	(20.3)	+	(26.7)	/	/	/	+	(21.3)	/	026	(+)	(+)	1	(+)	CH-STEC	+(20.8)	+(26.8)	/	/	+	(22.0)	+(27.3)	/	/	/	+(21.8)	/	026	+	PA
13	18.10	18.37	18.75	+		+	+	+	+	+	+	(20.9)	(26.4)	/	/	/	+	(20.3)	+	(27.2)	/	/	/	+	(24.0)	/	026	(+)	(+)	1	(+)	CH-STEC	+(21.3)	+(27.6)	/	/	+	(22.7)	+(26.8)	/	/	/	+(21.7)	/	026	+	PA
18	26.22	25.73	24.98	+		+	+	+	+	+	+	(20.7)	(26.0)	/	/	/	+	(21.4)	+	(26.6)	/	/	/	+	(21.5)	/	026	(+)	(+)	1	(+)	CH-STEC	+(22.0)	+(26.8)	/	/	+	(23.4)	+(25.9)	/	/	/	+(21.4)	/	026	+	PA
20	23.34*	19.29	19.52	+		+	+	+	+	+	+	(21.8)	(26.5)	/	/	/	+	(23.4)	+	(27.3)	/	/	/	+	(22.4)	/	026	(+)	(+)	1	(+)	CH-STEC	+(21.4)	+(27.6)	/	/	+	(22.9)	+(24.8)	/	/	/	+(20.9)	/	026	+	PA
22	17.50	19.73	20.23	+		+	+	+	+	+	+	(22.6)	(26.6)	/	/	/	+	(24.2)	+	(27.8)	/	/	/	+	(23.4)	/	026	(+)	(+)	1	(+)	CH-STEC	+(21.5)	+(27.8)	/	/	+	(22.9)	+(25.9)	/	/	/	+(21.1)	/	026	+	PA
23	20.55	21.98	22.63	+		+	+	+	+	+	+	(21.1)	(27.5)	/	/	/	+	(22.9)	+	(26.8)	/	/	/	+	(21.5)	/	026	(+)	(+)	1	(+)	CH-STEC	+(21.4)	+(27.7)	/	/	+	(22.4)	+(26.9)	/	/	/	+(21.4)	/	026	+	PA
3	17.81	18.16	18.27	+		+	+	+	+	+	+	(20.8)	(26.8)	/	/	/	+	(22.0)	+	(25.6)	/	/	/	+	(20.8)	/	026	(+)	(+)	1	(+)	CH-STEC	+(21.7)	+(27.2)	/	/	+	(23.1)	+(26.5)	/	/	/	+(21.7)	/	026	+	PA
4	12.13	17.71	17.92	+		+	+	+	+	+	+	(19.6)	(26.2)	/	/	/	+	(19.5)	+	(25.6)	/	/	/	+	(20.8)	/	026	(+)	(+)	1	(+)	CH-STEC	+(21.7)	+(26.9)	/	/	+	(22.9)	+(25.9)	/	/	/	+(21.6)	/	026	+	PA
7	19.24	19.46	19.81	+		+	+	+	+	+	+	(20.5)	(28.0)	/	/	/	+	(21.5)	+	(26.3)	/	/	/	+	(20.9)	/	026	(+)	(+)	1	(+)	CH-STEC	+(21.3)	+(26.8)	/	/	+	(22.6)	+(25.9)	/	/	/	+(21.2)	/	026	+	PA
8	18.40	18.98	19.19	+		+	+	+	+																																						

Collaborator : L

Aerobic mesophilic flora: 1400 CFU/g

N°Sample	Reference Method ISO/TS 13136										Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																Direct streaking final result	Final result	Agreement											
											PCR Result								Confirmation																					
	ADRIA internal method																			Direct Streaking																				
	PCR results		Final PCR Result	Confirmation				Final confirmation Result	Final Result	E. coli O157:H7 and STEC Screening								PCR on colonies								E. coli STEC Identification														
	stx	eae	sero-group	Direct streaking	IMS CH-STECK	IMS CT-RMAC	Latex O26	PCR (optional)	CCA									CH-STECK	Number of colonies tested	Latex O26	Plate	eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121								
2	34.04	28.18	30.34	+	-	+	-	-	-	/	27.56	/	/	/	/	28.21	/	/	/	/	/	-	-	-	/	/	/	/	/	/	/	/	/	/	/	/	/	NA		
5	-	/	/	-	-	+	-	-	-	/	27.57	/	/	/	/	28.69	/	/	/	/	/	-	-	-	/	/	/	/	/	/	/	/	/	/	/	/	NA			
9	-	/	/	-	-	+	-	-	-	/	28.41	/	/	/	/	30.65	/	/	/	/	/	-	-	-	/	/	/	/	/	/	/	/	/	/	/	/	NA			
10	-	/	/	-	-	+	-	-	-	/	28.25	/	/	/	/	28.65	/	/	/	/	/	-	-	-	/	/	/	/	/	/	/	/	/	/	/	/	NA			
12	-	/	/	-	-	-	-	-	-	/	28.21	/	/	/	/	28.72	/	/	/	/	/	-	-	-	/	/	/	/	/	/	/	/	/	/	/	/	NA			
16	-	/	/	-	-	-	-	-	-	/	29.47	/	/	/	/	27.26	/	/	/	/	/	-	-	-	/	/	/	/	/	/	/	/	/	/	/	/	NA			
21	-	/	/	-	-	+	-	-	-	/	28.96	/	/	/	/	28.53	/	/	/	/	/	-	-	-	/	/	/	/	/	/	/	/	/	/	/	/	NA			
24	-	/	/	-	-	+	-	-	-	/	28.75	/	/	/	/	29.31	/	/	/	/	/	-	-	-	/	/	/	/	/	/	/	/	/	/	/	/	NA			
1	18.79	19.18	19.89	+	+	+	+	+	+	28.15	28.01	/	/	/	30.06	30.28	/	/	/	30.06	/	O26	+	+	3	+	CH	18.73	27.00	/	/	20.21	25.02	/	/	18.54	/	O26	+	PA
6	25.33	25.97	26.41	+	+	+	+	+	+	25.00	27.65	/	/	/	27.37	27.68	/	/	/	25.93	/	O26	+	+	3	+	CH	17.66	28.20	/	/	18.94	24.41	/	/	17.75	/	O26	+	PA
11	21.66	23.06	23.38	+	+	+	+	+	+	23.75	27.68	/	/	/	25.99	27.78	/	/	/	24.57	/	O26	+	+	3	+	CH	18.58	27.53	/	/	20.08	25.48	/	/	18.91	/	O26	+	PA
13	20.94	21.38	22.13	+	+	+	+	+	+	24.29	28.96	/	/	/	26.21	27.07	/	/	/	23.16	/	O26	+	+	3	+	CH	20.25	26.68	/	/	21.65	25.19	/	/	19.86	/	O26	+	PA
18	22.33	21.82	22.50	+	+	+	+	+	+	23.10	29.63	/	/	/	24.00	26.97	/	/	/	22.33	/	O26	+	+	3	+	CH	18.46	28.78	/	/	19.90	24.79	/	/	18.50	/	O26	+	PA
20	22.75	24.18	24.43	+	+	+	+	+	+	26.85	27.22	/	/	/	25.43	28.47	/	/	/	29.00	/	O26	+	+	2	+	CH	18.98	29.41	/	/	20.53	24.72	/	/	18.47	/	O26	+	PA
22	23.39	22.74	23.27	+	-	+	-	-	+	24.94	28.57	/	/	/	27.19	27.95	/	/	/	24.34	/	O26	+	+	2	+	CH	19.02	28.66	/	/	20.48	24.41	/	/	18.55	/	O26	+	PA
23	21.58	23.20	24.04	+	+	+	+	+	+	28.55	/	/	/	/	28.84	/	/	/	/	-	-	-	-	/	/	/	/	/	/	/	/	/	/	/	/	ND				
3	17.63	18.14	18.27	+	+	+	+	+	+	20.84	26.73	/	/	/	22.76	27.27	/	/	/	21.89	/	O26	+	+	3	+	CH	18.60	28.17	/	/	19.53	24.70	/	/	18.51	/	O26	+	PA
4	21.37	21.45	21.99	+	+	+	+	+	+	21.71	26.57	/	/	/	23.81	26.82	/	/	/	22.16	/	O26	+	+	3	+	CH	19.10	27.99	/	/	20.69	27.22	/	/	19.13	/	O26	+	
7	19.39	20.08	20.32	+	+	+	+	+	+	20.99	27.76	/	/	/	22.78	28.58	/	/	/	22.31	/	O26	+	+	3	+	CH	21.07	35.67	/	/	22.51	24.39	/	/	18.34	/	O26	+	PA
8	19.17	19.22	19.71	+	+	+	+	+	+	21.26	28.33	/	/	/	22.57	28.18	/	/	/	21.80	/	O26	+	+	3	+	CH	18.36	25.36	/	/	19.13	24.80	/	/	18.79	/	O26	+	PA
14	19.87	21.31	21.67	+	+	+	+	+	+	22.84	28.74	/	/	/	24.38	27.93	/	/	/	22.96	/	O26	+	+	3	+	CH	19.64	27.18	/	/	20.86	26.74	/	/	20.20	/	O26	+	PA
15	21.06	21.58	21.76	+	-	+	+	+	+	22.52	28.95	/	/	/	24.35	28.13	/	/	/	22.73	/	O26	+	+	3	+	CH	19.42	27.19	/	/	20.55	25.49	/	/	19.47	/	O26	+	PA
17	21.21	21.84	22.00	+	+	+	+	+	+	20.23	28.07	/	/	/	22.15	28.16	/	/	/	21.																				

M (ADRIA)

Aerobic mesophilic flora: 340 CFU/g

<<<	Reference Method ISO/TS 13136*										Alternative method-SureTect STEC-BPW prewarmed (41.5°C) for 8 h at 41.5°C																		Final result Agreement													
											PCR Result								Confirmation																							
	ADRIA internal method				Direct Streaking														Direct Streaking				PCR on colonies																			
	PCR results		Final PCR Result	Confirmation	IMS CH-STECK	IMS CT-RMAC	Latex O26	PCR (optional)	Final confirmation Result	Final Result	E. coli O157:H7 and STEC Screening								E. coli STEC Identification						CCA	CH-STECK	Number of colonies tested	Latex O26	Plate	E. coli O157:H7 and STEC Screening						E. coli STEC Identification						
	stx	eae									eae	IPC	O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Final PCR result	stx	IPC				O157:H7 Target 1	O157:H7 Target 2	stx	IPC	O103	O111	O145	O26	O45/O121	Direct streaking final result		Final result		Agreement	
2	-	-	-	-	/	/	/	/	/	-	28.53	/	/	/	27.93	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	-	-	NA					
5	-	-	-	-	/	/	/	/	/	-	27.72	/	/	/	27.88	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	-	-	NA					
9	-	-	-	-	/	/	/	/	/	-	28.08	/	/	/	29.03	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	-	-	NA					
10	-	-	-	-	/	/	/	/	/	-	28.50	/	/	/	28.64	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	-	-	NA					
12	-	-	-	-	/	/	/	/	/	-	28.93	/	/	/	28.25	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	-	-	NA					
16	-	-	-	-	/	/	/	/	/	-	28.38	/	/	/	28.55	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	-	-	NA					
21	-	-	-	-	/	/	/	/	/	-	27.90	/	/	/	28.16	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	-	-	NA					
24	-	-	-	-	/	/	/	/	/	-	27.82	/	/	/	28.87	/	/	/	/	/	-	-	-			/	/	/	/	/	/	/	/	/	-	-	NA					
1	19.42	19.45	20.21	+		+	+	+	+	+	24.36	28.30	/	/	26.30	27.82	/	/	/	23.67	/	026	+	+	1	+	CCA	21.58	28.19	/	/	23.14	27.86	/	/	21.47	/	O26	+	PA		
6	23.18	22.36	23.5	+		+	+	+	+	+	24.49	27.42	/	/	26.73	27.75	/	/	/	24.66	/	026	+	+	1	+	CCA	21.11	28.59	/	/	22.8	27.31	/	/	20.34	/	O26	+	PA		
11	22.6	22.51	23.3	+		+	+	+	+	+	30.12	28.56	/	/	32.12	27.82	/	/	/	28.73	/	026	+	+	1	+	CCA	20.91	27.61	/	/	22.99	26.84	/	/	20.87	/	O26	+	PA		
13	23.1	22.25	23.3	+		+	+	+	+	+	26.25	28.59	/	/	28.27	28.34	/	/	/	26.01	/	026	+	+	1	+	CCA	20.7	28.49	/	/	22.66	27.35	/	/	20.71	/	O26	+	PA		
18	22.1	21.44	22.6	+		+	+	+	+	+	25.99	28.56	/	/	27.11	28.16	/	/	/	25.13	/	026	+	+	1	+	CCA	21.83	29.03	/	/	23.04	26.39	/	/	20.88	/	O26	+	PA		
20	22.0	21.59	22.4	+		+	+	+	+	+	23.30	27.58	/	/	25.05	27.29	/	/	/	23.07	/	026	+	+	1	+	CCA	19.72	28.64	/	/	21.02	26.47	/	/	19.81	/	O26	+	PA		
22	23.0	22.12	23.1	+		+	+	+	+	+	28.52	27.92	/	/	29.40	28.39	/	/	/	29.41	/	026	+	+	1	+	CCA	21.57	28.1	/	/	22.8	26.9	/	/	21.17	/	O26	+	PA		
23	-	-	-	-	/	/	/	/	/	-	28.45	28.05	/	/	29.75	28.41	/	/	/	28.74	/	026	+	+	1	+	CCA	22.3	28.1	/	/	23.82	27.3	/	/	21.76	/	O26	+	PD		
3	21.6	21.4	22.0	+		+	+	+	+	+	21.15	27.93	/	/	23.44	27.57	/	/	/	21.37	/	026	+	+	1	+	CCA	21.31	28.3	/	/	23	27.07	/	/	21.16	/	O26	+	PA		
4	21.4	21.14	21.7	+		+	+	+	+	+	21.28	27.92	/	/	23.28	27.28	/	/	/	21.53	/	026	+	+	1	+	CCA	22.91	30.01	/	/	24.57	27.18	/	/	21.19	/	O26	+	PA		
7	20.0	20.72	20.6	+		+	+	+	+	+	20.94	26.93	/	/	22.81	27.35	/	/	/	21.89	/	026	+	+	1	+	CCA	22.71	30.05	/	/	24.45	26.49	/	/	21.83	/	O26	+	PA		
8	17.9	18.02	18.6	+		+	+	+	+	+	23.71	30.15	/	/	25.59	26.82	/	/	/	22.21	/	026	+	+	1	+	CCA	20.02	28.64	/	/	21.82	26.6	/	/	19.88	/	O26	+	PA		
14	21.8	21.54	22.3	+		+	+	+	+	+	21.93	28.09	/	/	23.64	27.48	/	/	/	21.79	/	026	+	+	1	+	CCA	20.48	28.33	/	/	22.2	26.14	/	/	20.32	/	O26	+	PA		
15	19.6	20.02	20.3	+		+	+	+	+	+	22.35	28.34	/	/	24.20	27.17	/	/	/	22.08																						