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NF VALIDATION
Validation of alternative analytical methods
Application in food microbiology

Summary report

Validation study according to the ISO 16140-2

foodproof® *Salmonella* plus *Cronobacter* Detection LyoKit for *Salmonella* spp. detection

(Certificate number: QUA 18/12-12/24)

in infant formula with or without probiotics, related ingredients, and production environmental samples

Qualitative method

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This report consists of 104 pages, including 7 appendices.
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Competencies of the laboratory are certified by COFRAC accreditation for the analyses marked with the symbol◆.

Version 1
December 17, 2025

Cancels and replaces the previous version

LIST OF ABBREVIATIONS

Method & protocol	
BPW	Buffered Peptone Water
CFU	Colony Forming Units
ILS	Interlaboratory Study
MCS	Method Comparison Study
RLOD	Relative Level of Detection
RT	Relative Trueness
SE	Relative Sensitivity
SP	Relative Specificity
IC	Internal Control
Interpretation	
AL	Acceptability Limit
alt	Alternative method
$\overline{D}$	Average difference
FN	False Negative results
FP	False Positive results
FPR	False Positive Ratio
LOD	Limit of Detection
NA	Negative agreement
$NA_{FN\ (alt)}$	Negative Agreement due to false negative alternative-method results
ND	Negative Deviation
$ND_{FN\ (alt)}$	Negative Deviation due to false negative alternative-method results
PA	Positive Agreement
$PA_{FP\ (alt)}$	Positive Agreement due to false positive alternative-method results
PD	Positive deviation
$PD_{FP(alt)}$	Positive Deviation due to false positive alternative-method results
ref	Reference method
TNA	Total Negative Agreement
TND	Total Negative Deviation
Raw data	
-	No typical colonies but presence of background microflora
-A	No typical colonies but presence of high level of background microflora
-B	No typical colonies but presence of medium level of background microflora
-C	No typical colonies but presence of low level of background microflora
(x)	Number of colonies in the plate
*	Dilution of the extract in case of inhibition according to the alternative protocol (1/3 or 1/5 depending on the extraction)
1/2	50% level of target analyte
d	Doubtful result
i	Inhibition
ne	New DNA extraction
NC	Non-characteristic colony
NI	No identification
ni	Not isolated colony
No amp	Non characteristic PCR curve
m	Minority level of target analyte
M	Majority level of target analyte
p	Pure culture level of target analyte
st	Plate without any colony
w	Weak reaction
Bold typing	**artificially inoculated samples**

Quality Assurance documents related to this study can be consulted upon request from **HYGIENA LLC**.

The technical protocol and the result interpretation were carried out according to the ISO 16140-2 (2016), ISO 16140-2/A1 (2024) and the AFNOR technical rules (Revision 12).

Validation protocols	▪ ISO 16140-1 (2016): Microbiology of the food chain - Method validation - *Part 1: Vocabulary* ▪ ISO 16140-2 (2016) & ISO 16140-2/A1 (2024): Microbiology of the food chain - Method validation – *Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method* ▪ AFNOR Technical Rules (Revision 12)
Reference method♦	▪ ISO 6579-1 (2017): Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* - Part 1: Detection of *Salmonella* spp. ▪ ISO 6579-1/A1 (March 2020): Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* spp. - Part 1: Detection of *Salmonella* spp. Amendment 1: Broader range of incubation temperatures, amendment to the status of Annex D, and correction of the composition of MSRV and SC
Alternative method	**foodproof® *Salmonella* plus *Cronobacter* Detection LyoKit for *Salmonella* spp. detection**
Scope	☒ **Infant formula with or without probiotics and related ingredients** ☒ **Production environmental samples**
Certification organism	AFNOR certification

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

1 INTRODUCTION

The **food**proof® *Salmonella* plus *Cronobacter* Detection LyoKit for *Salmonella* spp. detection was validated in December 2024 (certificate number: QUA 18/12-12/24) in infant formula with or without probiotics, related ingredients and production environmental samples.

An extension was performed in February 2025 following a modification of the software to version 5.1. Data presented in this report were analysed using this software version.

A new version of the report (version 1) was published in December 2025 with minor editorial corrections.

2 METHOD PROTOCOLS

2.1 Alternative method

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

2.1.1 Principle

The **food**proof® *Salmonella* plus *Cronobacter* Detection LyoKit - is intended for the rapid detection of *Salmonella* spp*. and Cronobacter* spp. from infant formula with or without probiotics and related ingredients and production environmental samples.
The method is based on an enrichment step, DNA extraction and real-time PCR detection with PCR instruments with a FAM (*Salmonella* detection), HEX (*Cronobacter* detection) and a ROX (Internal Control - IC) detection channel.

2.1.2 Protocols

Different enrichment protocols are available depending on the products tested. Detailed information is given in **Appendix 1,** and an overview of the protocols is given in Table 1.

Table 1 - Overview of the enrichment protocols

Category	Type	Test portion size foodproof	Enrichment broth for the alternative method*	Dilution factor	Enrichment time	Enrichment temperature	Sample preparation
1- Infant formula with or without probiotics and related ingredients	a: Infant formula with probiotics	Up to 375 g	Pre-warmed BPW + vancomycin (10 mg/L)	1/10	16-24 h	37°C ± 1°C	ISO 6887-1-4-5 and ISO 27205
	c: Infant formula without probiotics	Up to 375 g	Pre-warmed BPW	1/10	16-24 h	37°C ± 1°C	ISO 6887-1 ISO 6887-5
	d: Related ingredients	Up to 375 g	Pre-warmed BPW	1/10	16-24 h	37°C ± 1°C	ISO 6887-1 ISO 6887-5
2- Production environmental samples	a: Surfaces	Swabs or sponges	BPW	10 ml or 100 ml	16-24 h	37°C ± 1°C	ISO 18593
	b: Vacuum dusts from non- probiotic production sites	Up to 200 g	Pre-warmed BPW	1/10	16-24 h	37°C ± 1°C	ISO 6887-1 ISO 6887-4

* Note: according to the ISO 6687 rules, for the usual 25 g test portion size for *Salmonella* screening and the usual 10 g test portion size for *Cronobacter* screening, no prewarming of the enrichment is required.

The extraction protocols are described in detail in **Appendix 1** and summarized in Table 2.

Table 2 - Extraction protocols

	StarPrep Three Kit (tube) S 400 18	StarPrep Three 8-Strip Kit S400 18 L	BAX Lysis protocol
Enriched sample	100 µL	100 µL	20 µL
Transfer in 8-tube strips	/		
Centrifuge	5 min at 8000 x *g*	10 min at 5400 x *g* or 25min at 2000 x *g*	/
Lysis buffer	200 µl	200 µl	150 µL protease + 12 mL lysis buffer: 200 µL/cluster tube
Heat treatment	10 min at 95-100°C	10 min at 95-100°C	20 minutes at 37°C 10 minutes at 95°C
Cooling	1 min at 15-25°C at room temperature	3-5 min at 15-25°C at room temperature	At least 5 minutes at 2-8°C
Mix vortex	2 sec	/	/
Centrifuge	2 min at 13000 x *g*	5 min at 5400 x *g* or 10 min at 2000 x *g*	/

The positive PCR results are confirmed by the tests described in the ISO method (ISO 6579-1 for *Salmonella* spp.). In addition to using biochemical galleries, the observed characteristic colonies on the selective agar plates can be confirmed with any appropriate ISO 16140-6:2019 validated method; any alternative method based on a different measurement principle than the principle used in the detection or using different markers (e.g., different antibodies, primers) if properly validated (e.g., ISO 16140 validation) according to the ISO 7218:2024 standard.

Two thermocyclers and software are in the scope of the validation:

- The BAX Q7 from Hygiena with BAX software 5.1 or higher.
- The LightCycler 480 II (LC 480 II) from Roche Diagnostics with LightCycler 480 version: 1.5.1.62 SP3 or higher.

Results are interpretated following guidelines described in the kit IFU. While software automatically gives a Ct value in each channel, additional manual interpretation is required by the end users to finalize the analysis.

- For BAX Q7: The PCR results are provided by the BAX® software, version 5.1 or later.

- For LC 480II: If a Ct value is given by the software, it is recommended to look at the raw data and consider negative in case no exponential curve is observed (no amp).

The data should be then interpretated as follow by the end-user:

FAM	HEX	ROX	Result interpretation
Positive	Positive	Positive or Negative	Positive for *Salmonella* spp. and *Cronobacter* spp.
Positive	Negative	Positive or Negative	Positive for *Salmonella* spp. and Negative for *Cronobacter* spp.
Negative	Positive	Positive or Negative	Positive for *Cronobacter* spp. and Negative for *Salmonella* spp.
Negative	Negative	Positive	Negative for *Salmonella* spp. and *Cronobacter* spp;
Negative	Negative	Negative	Invalid

Each target is independently detected by PCR without interference from the other.

In case of PCR inhibition, the DNA extract can be tested again diluted 1/5 in sterile water for the StarPrep Three kits and 1/3 for BAX lysis.

It is possible to store the enriched samples for 72 h at 5°C ± 3°C.

2.1.3 Restriction

There is no restriction.

2.2 Reference method♦

The reference method used is the ISO 6579-1 (2017): Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* - Part 1: Detection of *Salmonella* spp. and the ISO 6579-1/A1 (March 2020): Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* spp. - Part 1: Detection of *Salmonella* spp. Amendment 1: Broader range of incubation temperatures, amendment to the status of Annex D, and correction of the composition of MSRV and SC (see **Appendix 2**).

The ISO 6579-1 was validated using 25 g test portions. ADRIA has proven using internal data than higher test portion size can be used for the categories evaluated in this validation study. It was therefore decided, in agreement with the technical committee, to use high test portion size during the method comparison study (MCS), similarly to the test portion used by the alternative method (375 g or 200 g).

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

The ISO 6887-4: 2017 is allowing the addition of antibiotic when testing samples containing probiotics and refers in section 9.8. to ISO 27205 which specifically describes the use of vancomycin but also offers the possibility to use double strength BPW (BPW 2 T). For the reference method, the expert lab used BPW 2 T according to their internal procedure.

2.3 Study design

In the presence of probiotics, an unpaired study design was chosen due to the use of BPW 2T. For all other tested categories/types, a paired study design was selected, as similar test portions and enrichment protocols were applied.

This design was maintained for both the MCS and ILS studies to ensure consistency. However, BPW + vancomycin could have been used during the ILS to simplify study organization.

3 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 variety of samples and strains representative of the most frequently encountered products. This does not constitute an exhaustive list of the different matrices in the scope.
For any comment on the alternative method, please contact AFNOR Certification by logging on to the web page http://nf-validation.afnor.org/contact-2/.

3.1 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 Number and nature of samples

141 samples were analysed. The distribution per tested category and type is given in the following table. For all the tested extraction protocols (foodproof and BAX) and thermocycler (BAXQ7 and LC 480 II), the same repartition is obtained with 70 positive results and 71 negative results.

Table 3 – Distribution per tested category and type
All protocols

Category		Type		Positive samples	Negative samples	Total
1	Infant formula (IF) with or without probiotics and related ingredients	a	IF with probiotics	15	11	26
		b	IF without probiotics	13	9	22
		c	Related ingredients	12	10	22
			Total	**40**	**30**	**70**
2	Production environmental samples	a	Surfaces	15	15	30
		b	Vacuum dusts from non-probiotic production sites	15	26	41
			Total	**30**	**41**	**71**
All categories				**70**	**71**	**141**

3.1.2 Artificial contamination of samples

Due to the type of product evaluated, no natural contamination was found. Artificial contaminations were done by seeding with lyophilized strains or spiking protocol after heat treatment. The artificial contaminations are presented in **Appendix 3**.

83 samples were artificially contaminated using 22 different *Salmonella* spp strains. 70 gave a positive result. Among those positives, 25.7 % of samples were spiked after heat treatment at level ≤ 5 CFU and 62.9 % were inoculated by seeding at level ≤ 3 CFU.

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

Table 4 - Repartition of the positive samples per inoculation protocol and inoculation level

Category	Naturally contaminated	Spiking protocol		Seeding protocol		Total positive samples
		≤ 5 CFU	3 < x ≤ 10 CFU	≤ 3 CFU	3 < x ≤ 10 CFU	
1	0	5	0	29	6	**40**
2	0	13	0	15	2	**30**
Number of samples	0	18	0	44	8	**70**
%	**0.0**	**25.7**	**0.0**	**62.9**	**11.4**	**100.0**

Among those positive results, 39 positives results came from *Salmonella* spp. strains inoculated alone and 31 for *Salmonella* spp. strains co-inoculated with *Cronobacter* spp. The repartition of the inoculation scheme per category is given in Table 5.

Table 5 - Repartition of the positive samples per inoculation protocol and inoculation level

Category	*Salmonella* spp (A)	*Salmonella* spp + *Cronobacter* spp (B)	Total positive samples
	Number of samples	Number of samples	
1	23	17	40
2	16	14	30
Total	**39**	**31**	**70**

0 % of the samples were naturally contaminated. This low percentage is linked to the categories tested with a low prevalence of *Salmonella* spp. (heat treated products).

3.1.3 Protocols applied during the validation study

Enrichment step

Higher test portion with the minimum incubation time was applied for the enrichment step: 16 h at 37°C.

Lactic bacteria enumeration

For the category 1, for probiotics containing products, lactic bacteria enumeration was carried out using MRS pH 5.7 incubated in anaerobic conditions for 72 h at 30°C ± 1°C (ISO 15214).

Extraction

Two types of extraction were evaluated on each sample:

- foodproof® StarPrep: Three Kit or Three 8-Strip Kit with each sample tested by one of the kit formats. The 10 min 5400 g centrifugation protocol was used during the validation.
- BAX Real-Time Lysis procedure for all sample tested.

The repartition of the samples tested with each protocol is shown in the table below.

Table 6 - Distribution of the number of samples per tested category and extraction protocols

Category	StarPrep Three Kit	StarPrep Three 8-Strip Kit	BAX Lysis	Total number of samples
	Number of samples	Number of samples	Number of samples	
1	36	34	70	70
2	38	33	71	71
Total	**74 (52.5%)**	**67 (47.5%)**	**141 (100%)**	**141**

PCR

Two thermocyclers were included in the validation:

- The BAX Q7 from Hygiena with BAX software 5.1
- The LightCycler 480 II (LC 480 II) from Roche Diagnostics with LightCycler 480 II version: 1.5.1.62 SP3.

Analyses of the PCR results were carried out following guidelines given in the IFU.

Confirmations

The positive PCR tests were confirmed by the tests described in the ISO methods:

- Subculture of the enriched sample in RVS broth (0.1 ml + 10 ml) incubated for 24 h ± 3 h or 48 h ± 3 h (low moisture products) at 41.5°C ± 1°C and in MKTTn broth (1 ml + 10 ml) incubated for 24 h ± 3 h or 48 h ± 3 h (low moisture products) at 34-38°C.
- Streaking (10 µl) onto XLD and a second selective agar plate (ASAP) incubated for 24 h± 2h at 34-38°C.
- The typical colonies are confirmed by biochemical gallery (API 20E) (without purification step) and serological tests (after purification step).

Enrichment broths storage for 72 h at 5 °C ± 3 °C

The enrichment broths from positive and discordant samples were stored for 72 h at 5°C ± 3 °C and the PCR was tested again. Storage for 72h at 5°C ± 3 °C is a possibility offered in the ISO 6579-1 method. As the alternative method uses similar enrichment broth than the reference, the confirmatory tests were thus not tested again except in case of change is observed between both PCR results (before / after storage).

> **Inhibition**

In case of inhibition, the DNA extract was tested diluted 1/5 for the StarPrep Three kit following IFU guidelines. No inhibition was found for the BAX lysis.

3.1.4 Test results

Raw data per category are given in **Appendix 4**. The results are given in the following tables.

Table 7 – Summary of results obtained with the reference and alternative methods (after confirmation) of all samples for each category - foodproof® Extraction - BAX Q7

Categories		Portion		Types	Study Design	PA	PD	TND	TNA
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics	Unpaired	10	3	2	11
		375g	b	IF without probiotics	Paired	13	0	0	9
		375g	c	Related ingredients	Paired	12	0	0	10
					Total	35	3	2	30
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	0	15
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	0	26
					Total	30	0	0	41
All categories						**65**	**3**	**2**	**71**

Table 8 – Summary of results obtained with the reference and alternative methods (after confirmation) of all samples for each category - foodproof® Extraction - LightCycler 480 II

Categories		Portion		Types	Study Design	PA	PD	TND	TNA
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics	Unpaired	10	3	2	11
		375g	b	IF without probiotics	Paired	13	0	0	9
		375g	c	Related ingredients	Paired	12	0	0	10
				Total		35	3	2	30
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	0	15
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	0	26
				Total		30	0	0	41
All categories						**65**	**3**	**2**	**71**

Table 9 Summary of results obtained with the reference and alternative methods (after confirmation) of all samples for each category - BAX lysis - BAX Q7

Categories		Portion		Types	Study Design	PA	PD	TND	TNA
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics	Unpaired	10	3	2	11
		375g	b	IF without probiotics	Paired	13	0	0	9
		375g	c	Related ingredients	Paired	12	0	0	10
		Total				35	3	2	30
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	0	15
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	0	26
		Total				30	0	0	41
All categories						**65**	**3**	**2**	**71**

Table 10 – Summary of results obtained with the reference and alternative methods (after confirmation) of all samples for each category - BAX lysis - LightCycler 480 II

Categories		Portion		Types	Study Design	PA	PD	TND	TNA
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics	Unpaired	10	3	2	11
		375g	b	IF without probiotics	Paired	13	0	0	9
		375g	c	Related ingredients	Paired	12	0	0	10
		Total				35	3	2	30
2	Environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	0	15
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	0	26
		Total				30	0	0	41
All categories						**65**	**3**	**2**	**71**

With, for Paired evaluation: $TND = ND_{FN(alt)}$ $TNA = NA + PD_{FP(alt)}$

And for Unpaired evaluation: $TND = ND + ND_{FN(alt)} + PA_{FP(alt)}$ $TNA = NA + NA_{FN(alt)} + PD_{FP(alt)}$

3.1.5 Calculation of relative trueness (RT), sensitivity (SE) and false positive ratio (FPR) and false negative ratio (FNR) for the alternative method

The calculations are presented in the following tables.
A summary of the results is given in Table 15.

Table 11 Calculation of relative trueness (RT), sensitivity (SE), false positive ratio (FPR) and false negative ratio (FNR) for the alternative method - foodproof® Extraction - BAX Q7

Categories		Portion		Types	Study Design	PA	$PA_{FP(alt)}$	NA	$NA_{FN(alt)}$	PD	ND	$ND_{FN(alt)}$	$PD_{FP(alt)}$	TND	TNA	SE_{alt} %	SE_{ref} %	RT %	FPR %	FNR %
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics	Unpaired	10	0	11	0	3	2	0	0	2	11	86.7	80.0	80.8	0.0	0.0
		375g	b	IF without probiotics	Paired	13	0	9	0	0	0	0	0	0	9	100.0	100.0	100.0	0.0	0.0
		375g	c	Related ingredients	Paired	12	0	10	0	0	0	0	0	0	10	100.0	100.0	100.0	0.0	0.0
					Total	35	0	30	0	3	2	0	0	2	30	95.0	92.5	92.9	0.0	0.0
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	15	0	0	0	0	0	0	15	100.0	100.0	100.0	0.0	0.0
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	25	0	0	0	0	1	0	26	100.0	100.0	100.0	3.8	0.0
					Total	30	0	40	0	0	0	0	1	0	41	100.0	100.0	100.0	2.4	0.0
All categories						**65**	**0**	**70**	**0**	**3**	**2**	**0**	**1**	**2**	**71**	**97.1**	**95.7**	**96.5**	**1.4**	**0.0**

Table 12 – Calculation of relative trueness (RT), sensitivity (SE), false positive ratio (FPR) and false negative ratio (FNR) for the alternative method) - foodproof® Extraction - LightCycler 480 II

Categories		Portion		Types	Study Design	PA	$PA_{FP(alt)}$	NA	$NA_{FN(alt)}$	PD	ND	$ND_{FN(alt)}$	$PD_{FP(alt)}$	TND	TNA	SE_{alt} %	SE_{ref} %	RT %	FPR %	FNR %
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics	Unpaired	10	0	11	0	3	2	0	0	2	11	86.7	80.0	80.8	0.0	0.0
		375g	b	IF without probiotics	Paired	13	0	9	0	0	0	0	0	0	9	100.0	100.0	100.0	0.0	0.0
		375g	c	Related ingredients	Paired	12	0	10	0	0	0	0	0	0	10	100.0	100.0	100.0	0.0	0.0
					Total	35	0	30	0	3	2	0	0	2	30	95.0	92.5	92.9	0.0	0.0
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	15	0	0	0	0	0	0	15	100.0	100.0	100.0	0.0	0.0
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	26	0	0	0	0	0	0	26	100.0	100.0	100.0	0.0	0.0
					Total	30	0	41	0	0	0	0	0	0	41	100.0	100.0	100.0	0.0	0.0
All categories						**65**	**0**	**71**	**0**	**3**	**2**	**0**	**0**	**2**	**71**	**97.1**	**95.7**	**96.5**	**0.0**	**0.0**

Table 13 – Calculation of relative trueness (RT), sensitivity (SE), false positive ratio (FPR) and false negative ratio (FNR) for the alternative method - BAX lysis - BAX Q7

Categories		Portion		Types	Study Design	PA	$PA_{FP(alt)}$	NA	$NA_{FN(alt)}$	PD	ND	$ND_{FN(alt)}$	$PD_{FP(alt)}$	TND	TNA	SE_{alt} %	SE_{ref} %	RT %	FPR %	FNR %
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics	Unpaired	10	0	10	0	3	2	0	1	2	11	86.7	80.0	80.8	9.1	0.0
		375g	b	IF without probiotics	Paired	13	0	9	0	0	0	0	0	0	9	100.0	100.0	100.0	0.0	0.0
		375g	c	Related ingredients	Paired	12	0	10	0	0	0	0	0	0	10	100.0	100.0	100.0	0.0	0.0
					Total	35	0	29	0	3	2	0	1	2	30	95.0	92.5	92.9	3.3	0.0
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	15	0	0	0	0	0	0	15	100.0	100.0	100.0	0.0	0.0
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	26	0	0	0	0	0	0	26	100.0	100.0	100.0	0.0	0.0
					Total	30	0	41	0	0	0	0	0	0	41	100.0	100.0	100.0	0.0	0.0
All categories						**65**	**0**	**70**	**0**	**3**	**2**	**0**	**1**	**2**	**71**	**97.1**	**95.7**	**96.5**	**1.4**	**0.0**

Table 14 – Calculation of relative trueness (RT), sensitivity (SE), false positive ratio (FPR) and false negative ratio (FNR) for the alternative method - BAX lysis - LightCycler 480 II

Categories		Portion		Types	Study Design	PA	$PA_{FP(alt)}$	NA	$NA_{FN(alt)}$	PD	ND	$ND_{FN(alt)}$	$PD_{FP(alt)}$	TND	TNA	SE_{alt} %	SE_{ref} %	RT %	FP %	FNR %
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics	Unpaired	10	1	11	0	3	1	0	0	2	11	86.7	80.0	80.8	9.1	0.0
		375g	b	IF without probiotics	Paired	13	0	9	0	0	0	0	0	0	9	100.0	100.0	100.0	0.0	0.0
		375g	c	Related ingredients	Paired	12	0	10	0	0	0	0	0	0	10	100.0	100.0	100.0	0.0	0.0
					Total	35	1	30	0	3	1	0	0	2	30	95.0	92.5	92.9	3.3	0.0
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	14	0	0	0	0	1	0	15	100.0	100.0	100.0	6.7	0.0
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	26	0	0	0	0	0	0	26	100.0	100.0	100.0	0.0	0.0
					Total	30	0	40	0	0	0	0	1	0	41	100.0	100.0	100.0	2.4	0.0
All categories						**65**	**1**	**70**	**0**	**3**	**1**	**0**	**1**	**2**	**71**	**97.1**	**95.7**	**96.5**	**2.8**	**0.0**

Table 15 - Summary of results

		foodproof® Extraction		BAX lysis	
		BAX Q7	LC 480 II	BAX Q7	LC 480 II
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA + PD)}{(PA + TND + PD)} x\ 100\ \%$	97.1 %	97.1 %	97.1 %	97.1 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA + TND)}{(PA + TND + PD)} x\ 100\ \%$	95.7 %	95.7 %	95.7 %	95.7 %
Relative trueness	$RT = \frac{(PA + TNA)}{N} x100\ \%$	96.5 %	96.5 %	96.5 %	96.5 %
False positive ratio for the alternative method	$FPR = \frac{PA_{FP(alt)} + PD_{FP\,(alt)}}{TNA} x\ 100\ \%$	1.4 %	0.0 %	1.4 %	2.8 %
False negative ratio for the alternative method	$FNR = \frac{NA_{FN(alt)} + ND_{FN(alt)}}{PA+TND+PD} x\ 100\%$	0.0 %	0.0 %	0.0 %	0.0 %

3.1.6 Analysis of discordant results

The negative deviations are given in Table 16 and the positive deviations in Table 17.

Negative deviations

Two negative deviations were observed for infant formula with probiotics with identical results for all protocols evaluated. The presence of *Salmonella* spp was not confirmed in the enrichment broth of those samples nor in any of the samples in negative agreement (NA).

Positive deviations

Three positive deviations were observed with identical results obtained for all protocols evaluated. They all concern the infant formula with probiotics (unpaired design)

The analyses of discordant results according to the ISO 16140-2 is showed in tables 18 to 21.

Table 16 - Negative deviations

Sample N°	Product	Strain inoculated	Inoculation level CFU/test portion	ISO 6579-1♦	foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - Pre-warmed BPW or Pre-warmed BPW + vancomycin (10 mg/L) or BPW- 16h-37°C												Category	Type
					PCR result											Confirmation	Agreement					
					foodproof® extraction						BAX lysis						foodproof® extraction		BAX Lysis			
					BAX Q7			LC480 II			BAX Q7			LC480 II								
					Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result		BAX Q7	LC 480 II	BAX Q7	LC 480 II		
3562	Infant milk powder. 6-12 months. with probiotics (*B.* Infantis 3.2 x 10^7 CFU/g) (23%MG)	S. Norwich Ad1172	0.3	+	0.0	37.6	-	0.0	32.99	-	0.0	38.6	-	0	33.02	-	-	ND	ND	ND	ND	1	a
3565	Infant milk powder. babies. with probiotics (*B. lactis* 3.5 x 10^7 CFU/g) (23.6% fat)	S. Norwich Ad1172	0.3	+	0.0	37.7	-	0.0	33.53	-	0.0	38.4	-	38.28 0.0 0.0	33.13 32.77 32.87	+ - -	-	ND	ND	ND	$PA_{FP(alt)}$	1	a

Table 17 - Positive deviations

Sample N°	Product	Strain inoculated	Inoculation level CFU/test portion	ISO 6579-1♦	foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - Pre-warmed BPW or Pre-warmed BPW + vancomycin (10 mg/L) or BPW- 16h-37°C												Category	Type
					PCR result											Confirmation	Agreement					
					foodproof® extraction						BAX lysis						foodproof® extraction		BAX Lysis			
					BAX Q7			LC480 II			BAX Q7			LC480 II								
					Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result		BAX Q7	LC 480 II	BAX Q7	LC 480 II		
3564	Infant milk powder. from 6 months. with probiotics (*B. lactis* 3.5 x 10^7 CFU/g) (26% fat)	S. Norwich Ad1172	0.3	-	19.9	37.9	+	16.51	33.20	+	20.2	37.3	+	17.24	37.04	+	+	PD	PD	PD	PD	1	a
3801	Infant milk powder. 1st age. with probiotics (B. lactis 8.6 x 10^5 CFU/g) (26% fat)	S. Ohio Ad2213 (+ *C. sakazakii* Ad935)	0.3/2.4	-	17.5	0.0	+	15.32	0.0	+	20.1	0.0	+	17.67	0.0	+	+	PD	PD	PD	PD	1	a
764	Infant milk powder with probiotics. after 10 months (*L. reuteri* DSM 17938 1.55 x 10^5 CFU/g) (23% fat)	S. Anatum Ad1166	1.0	-	29.1	36.4	+	26.23	30.2	+	28.8	37.7	+	27.02	31.1	+	+	PD	PD	PD	PD	1	a

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

Table 18 - Analyses of discordant results - foodproof® Extraction - BAX Q7

Categories		Protocol	Types		Design	N+	TND	PD	Paired				Unpaired		Mixed	
									TND-PD	AL	TND+PD	AL	TND-PD	AL	TND-PD	AL
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics (L. johnsonii, S. thermophilus and each species of the genus Bifidobacterium)	Unpaired	15	2	3					-1		-1	
		375g	b	IF without probiotics	Paired	13	0	0	0		0				0	
		375g	c	Related ingredients	Paired	12	0	0	0		0				0	
				Total	/	40	2	3	0	3	0	6	-1	3	-1	3
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	0	0		0				0	
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	0	0		0				0	
				Total	/	30	0	0	0	3	0	6	0	3	0	3
All categories					/	**70**	**2**	**3**	/	/	/	/	/	/	**-1**	**4**

Table 19 - Analyses of discordant results - foodproof® Extraction - LightCycler 480 II

Categories		Protocol	Types		Design	N+	TND	PD	Paired				Unpaired		Mixed	
									TND-PD	AL	TND+PD	AL	TND-PD	AL	TND-PD	AL
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics (L. johnsonii, S. thermophilus and each species of the genus Bifidobacterium)	Unpaired	15	2	3					-1		-1	
		375g	b	IF without probiotics	Paired	13	0	0	0		0				0	
		375g	c	Related ingredients	Paired	12	0	0	0		0				0	
				Total	/	40	2	3	0	3	0	6	-1	3	-1	3
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	0	0		0				0	
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	0	0		0				0	
				Total	/	30	0	0	0	3	0	6	0	3	0	3
All categories					/	**70**	**2**	**3**	/	/	/	/	/	/	**-1**	**4**

Table 20 - Analyses of discordant results - BAX Real-Time lysis procedure - BAX Q7

Categories		Protocol		Types	Design	N+	TND	PD	Paired				Unpaired		Mixed	
									TND-PD	AL	TND+PD	AL	TND-PD	AL	TND-PD	AL
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics (L. johnsonii, S. thermophilus and each species of the genus Bifidobacterium)	Unpaired	15	2	3					-1		-1	
		375g	b	IF without probiotics	Paired	13	0	0	0		0				0	
		375g	c	Related ingredients	Paired	12	0	0	0		0				0	
				Total	/	40	2	3	0	3	0	6	-1	3	-1	3
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	0	0		0				0	
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	0	0		0				0	
				Total	/	30	0	0	0	3	0	6	0	3	0	3
All categories					/	**70**	**2**	**3**	/	/	/	/	/	/	**-1**	**4**

Table 21 - Analyses of discordant results - BAX Real-Time lysis procedure - LightCycler 480 II

Categories		Protocol		Types	Design	N+	TND	PD	Paired				Unpaired		Mixed	
									TND-PD	AL	TND+PD	AL	TND-PD	AL	TND-PD	AL
1	Infant formula (IF) with or without probiotics and related ingredients	375g	a	IF with probiotics (L. johnsonii, S. thermophilus and each species of the genus Bifidobacterium)	Unpaired	15	2	3					-1		-1	
		375g	b	IF without probiotics	Paired	13	0	0	0		0				0	
		375g	c	Related ingredients	Paired	12	0	0	0		0				0	
				Total	/	40	2	3	0	3	0	6	-1	3	-1	3
2	Production environmental samples	Swab/ sponge/ wipe	a	Surfaces	Paired	15	0	0	0		0				0	
		200g	b	Vacuum dusts from non-probiotic production sites	Paired	15	0	0	0		0				0	
				Total	/	30	0	0	0	3	0	6	0	3	0	3
All categories					/	**70**	**2**	**3**	/	/	/	/	/	/	**-1**	**4**

The observed values for TND - PD meet the acceptability limit for each individual category and for the two combined categories whatever the extraction kits and thermocycler used (calculated values ≤ AL).

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

No modification of the discordant results is observed after 72 h storage. Analyses from Tables 19 to 22 are therefore also applicable after storage 72h at 5 ± 3°C.

The observed values for TND - PD meet the acceptability limit for each individual category and for the two combined categories whatever the extraction kits and thermocycler used (calculated values ≤ AL). It is possible to store the enrichment broth for 72h at 5 ± 3°C.

3.1.8 Confirmation

Four samples with positive PCR results in one of the protocols evaluated were not confirmed by cultural methods. For all these samples, replicates of the PCR test were carried on. Negative results were found after repetition for three samples. For all, very late positives results were obtained. Only one of them were spiked with a *Salmonella* spp strain. The presence of free DNA in the sample could be the cause of these false positive results.

Table 22 – Positive PCR results not confirmed by cultural methods

Sample N°	Product	Strain inoculated	ISO 6579-1♦	foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C												Category	Type
				PCR result											Confirmation	Agreement					
				foodproof® extraction						BAX lysis						foodproof extraction		BAX Lysis			
				BAX Q7			LC480 CC			BAX Q7			LC480 II								
				Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result		BAX Q7	LC 480 II	BAX Q7	LC 480 II		
3565	**Infant milk powder, babies, with probiotics (B. lactis 3.5 x 10^7 CFU/g) (23.6% fat)**	*S.* Norwich Ad1172	+	0.0	37.7	-	0.0	33.53	-	0.0	38.4	-	38.28 0.0 0.0	33.13 32.77 32.87	+ - -	-	**ND**	**ND**	**ND**	**$PA_{FP(alt)}$**	1	a
3566	Infant milk powder. 6-12 months. follow-on milk. with probiotics (B. infantis 2.5 x 10^6 CFU/g) (26% fat)	/	-	0.0	0.0	-	0.0	0.0	-	41.3 0.0 0.0	0.0 0.0 0.0	+ - -	0.0	0.0	-	-	**NA**	**NA**	**$PD_{FP(alt)}$**	**NA**	1	a
3639	Swab before cleaning (dairy industry)	/	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	40.17 0.0 0.0	0.0 0.0 0.0	+ - -	-	**NA**	**NA**	**NA**	**$PD_{FP(alt)}$**	2	a
556	Vacuum cleaner dust n°7 (non-probiotic dairy industry)	/	-	39.8 42.2 41.6	36.4 36.7 36.8	+ + +	0.0	30.71	-	0.0	37.6	-	0.0	32.94	-	-	**$PD_{FP(alt)}$**	**NA**	**NA**	**NA**	2	b

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

3.1.9 PCR inhibition

261 PCR was performed per extraction protocol and thermocycler. 5 PCR inhibitions were observed with the foodproof extraction and the BAX Q7 (1.9 % of the PCR) and 3 inhibitions with the foodproof extraction and the LC 480 II (1.5% of the PCR). A repetition of the testing or a 1:5 dilution of the DNA extracts was sufficient to obtain a result, and the result obtained where consistent with the other PCR condition and confirmation result (no false negative).

No inhibition was observed with the BAX lysis (0% of the PCR) and therefore, the 1/3 dilution was not evaluated.

Table 23 - Samples with PCR inhibitions

Sample N°	Product	Incubation time	foodproof extraction						BAX Lysis						Category	Type
			BAX Q7			LC480 II			BAX Q7			LC480 II				
			Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result		
3570	Infant milk powder. babies. with probiotics (B. lactis 3.5 x 10^7 CFU/g) (23.6% fat)	16h	0.0 0.0 0.0*	0.0 0.0 0.0*	i - -*	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	1	a
3563	**Infant milk powder. 6-12 months. with probiotics (B. lactis 1.8 x 10^6 CFU/g) (26%MG)**	16h + 72h storage	21.8	38.4	+	0.0 29.33 20.66*	0.0 0.0 40.34*	i + +*	23.0	38.3	+	20.69	35.25	+	1	a
3407	Floor surface swabs before cleaning (dairy industry)	16 h	0.0 0.0 0.0*	0.0 0.0 0.0*	i - -*	0.0	22.50 (no amp)	-	0.0	0.0	-	0.0	0.0	-	2	a
3638	**Vacuum nozzle swab. before cleaning (dairy industry)**	16h + 72h storage	0.0 21.3 24.2*	0.0 37.3 45.0*	i + +*	18.75	33.18	+	26.0	38.4	+	20.44	37.11	+	2	a
3639	Swab before cleaning (dairy industry)	16h + 72h storage	0.0 0.0 0.0*	0.0 0.0 0.0*	i - -*	0.0	0.0	-	0.0	0.0	-	41.95 40.23 0.0	0.0 0.0 0.0	+ + -	2	a
3640	Swab after cleaning (dairy industry)	16h + 72h storage	0.0 0.0 0.0*	0.0 0.0 0.0*	i - -*	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	2	a
557	Vacuum cleaner dust n°8 (non-probiotic dairy industry)	16h	0.0	0.1	-	0.0 0.0 0.0*	0.0 0.0 26.43*	i - -*	0.0	0.0	-	0.0	35.25 (uncertain)	-	2	b
561	**Vacuum cleaner dust n°13-14 (non-probiotic dairy industry)**	16h	23.2	37.6	+	0.0 20.9 25.27*	0.0 0.0 40.68*	i + +*	22.9	36.8	+	21.69	32.2	+	2	b

** 1:5 dilution of the extract*

3.2 Relative level of detection

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

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

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

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

3.2.1 Experimental design

Two (matrix/strain) pairs were analysed by the reference method and by the alternative method (See Table 24).

The following protocol was applied:

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

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

For category 1, the inoculation level was determined by MPN and enumeration of the inoculum. Close results were obtained by both methods. LOD_{50} was determined using the MPN results.

Table 24 - Defined (matrix/strain) pairs for the RLOD determination

Category		Matrix	Inoculated strain	Test portion for the reference method	Test portion for the alternative method	Origin	Inoculating cells	Stabilization conditions	Protocol applied for Ref and Alt methods	Study design
1	**Infant formula with or without probiotics and related ingredients**	Maltodextrin	*Salmonella* Cerro Ad2152	375 g	375 g	Whey	Lyophilized culture	Storage for 2 weeks at room temperature	Pre-warmed BPW + d 1/10 16 h at 37°C ± 1°C	Paired
2	**Production environmental samples**	Stainless steel surface (1)	*Salmonella* Anatum Ad2718 + co-inoculation with 10 x *Citrobacter freundii 39*	Surface 4”x4” (sponge)	Surface 4”x4” (sponge)	Dairy industry	Liquid inoculum	Overnight at ambient temperature	BPW 16 h at 37°C ± 1°C	Paired

(1) : For this matrix, it was not possible to calculate the LOD50 as the contamination level was not taken into account the die off of the inoculated strain during the overnight storage.

3.2.2 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 version 4 (2024-01-10). The RLOD are given in Table 25.

Identical results were obtained between the reference and alternative method for all matrix / strain pairs tested and all protocols after confirmations.

Table 25 – Presentation of RLOD before and after confirmation of the alternative method results

Category	Matrix / strain	foodproof® Extraction				BAX Lysis			
		BAX Q7		Lightcycler 480 II		BAX Q7		Lightcycler 480 II	
		AL	RLOD [95% confidence limit]	AL	RLOD [95% confidence limit]	AL	RLOD [95% confidence limit]	AL	RLOD [95% confidence limit]
1	Maltodextrin / *Salmonella* Cerro Ad2152	1.5	1.000 [0.442-2.262]	1.5	1.000 [0.442-2.262]	1.5	1.000 [0.442-2.262]	1.5	1.000 [0.442-2.262]
2	Stainless steel surface(1) / *Salmonella* Anatum Ad2718 + *Citrobacter freundii 39*		1.000 [0.454-2.202]		1.000 [0.454-2.202]		1.000 [0.454-2.202]		1.000 [0.454-2.202]
Combined			**1.000 [0.567-1.764]**		**1.000 [0.567-1.764]**		**1.000 [0.567-1.764]**		**1.000 [0.567-1.764]**

(1) : For this matrix, it was not possible to calculate the LOD50 as the contamination level was not taken into account the die off of the inoculated strain during the overnight storage.

The LOD_{50} calculations were done using the Excel spreadsheet available at http://standards.iso.org/iso/16140 POD-LOD calculation program - version 12, 2024-03-05. The tests are given in Table 26.

Table 26 - LOD_{50} results

Category	(Strain / matrix) pair	Level of detection at 50% (CFU / test portion) according to Wilrich & Wilrich[1]	
		Reference method	Alternative method
1	Maltodextrin (375g) / S. Cerro Ad2152	0.5 [0.3-0.9]	0.5 [0.3-0.9]
Combined results		**0.5 [0.3-0.9]**	**0.5 [0.3-0.9]**

3.2.3 Conclusion

The RLOD values (using the confirmed alternative method results) meet the acceptability limit of 1.5 for paired studies for the two matrix/strain pairs tested.

The LOD_{50} for category 1 was calculated and is at 0.5 CFU/test portion for the reference method and the alternative method.

3.3 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.

3.3.1 Test protocols

- **Inclusivity**

100 target strains were freshly cultured in BHI medium at 37°C. Dilutions were made in order to inoculate 10 -100 CFU/225 ml BPW supplemented with vancomycin broth (10 mg/L) as most stringent enrichment. The alternative method protocol was then performed.

The broths were incubated for 16 h at 37°C ± 1°C; the protocol of the alternative method was then applied using the foodproof® StarPrep (Three 8-Strip Kit or Three Kit) and BAX lysis. PCR were performed with the BAX® System Q7 and the LightCycler 480 II. Confirmatory tests were also carried on.

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

- **Exclusivity**

30 non-target strains were freshly cultured in BHI medium at 37°C. Dilutions were made in order to inoculate about 105 CFU/ml BPW broth. The BPW broth was incubated for 24 h at 37°C ± 1°C. The alternative method was then performed using the foodproof® StarPrep (Three kit or Three 8-Strip Kit) and the BAX lysis protocol for extraction before performing the PCR using BAX® System Q7 and the LightCycler 480 II.

3.3.2 Results

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

- **Inclusivity**

All the 100 targets strains gave positive results by PCR for all extraction protocols and thermocyclers.

Two strains were not able to grow on ASAP selective agar plates but were able to grow on XLD: *S*. Abortusovis Ad2320, *S*. Abortusequi Ad2321.

Some strains grown but giving non-characteristic blue colonies on ASAP plates:
S. Adelaïde Ad2319, *S.* Luciana CIP 105626, *S*. Strasbourg CIP105632.

- **Exclusivity**

None of the 30 non-target strains was detected by the PCR in any of tested protocols (extraction protocol and thermocycler).

3.4 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	The storage temperature is 2 - 8°C. The shelf-life is given on the package. All the reagents shall be stored at the temperature mentioned on the package.		
Time to result	**Steps**	**Reference method**	**Alternative method**
	Negative samples		
	Sampling enrichment	Day 0	Day 0
	Subculture in RVS and MKTTn	Day 1	/
	Lysate	/	Day 1
	PCR test	/	Day 1
	Streaking onto plates	Day 2	/
	Reading plate	Day 3	/
	Results	Day 3	Day 1
	Presumptive positive or positive results		
	Subculture in RVS and MKTTn	Day 1	Day 1
	Streaking onto plates	Day 2	Day 2
	Reading plate	Day 3	Day 3
	Confirmatory tests	Day 4 or Day 5	Day 4 or Day 5
	Results	Day 4 or Day 5	Day 4 or Day 5
Common step with the reference method	Sampling enrichment for BPW protocol		

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

4 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.

4.1 Study Design

The inter-laboratory study was performed in April 2024. In agreement with the technical committee a 25 g test portion was selected to allow a direct comparison with the reference method and simplify the organisation of the ILS study.
As stated in 2.2 and 2.3, BPW 2 T was kept for the reference method during the ILS study, resulting in an unpaired study design. However, a paired design could have been achieved if BPW supplemented with vancomycin had been used in both screening methods.

4.2 Study organisation

- *Collaborators number*

Samples were sent to 16 participants from 14 laboratories and from 6 different countries.

The different extraction methods and instruments were tested by the participants as shown in the table below.

		Instrument		Total
		LC480	BAX Q7	
Extraction method	StarPrep Three	4	3	**7**
	BAX lysis	3	6	**9**
Total		**7**	**9**	**16**

- *Matrix and strain used*

25g test portion of Infant formula with probiotics (*Lactobacillus reuteri)* was inoculated with a lyophilised strain of *Salmonella* Anatum Ad2706 strain isolated from milk powder.

The samples were co-inoculated with a *Cronobacter* spp. strain.

Samples

Samples were prepared and inoculated on Tuesday 2nd April 2024, as described below:

- 24 blind coded samples (25 g) for *Salmonella* spp. detection by the **ISO 6579-1** reference method.
- 24 blind coded samples (25 g) for *Salmonella* spp. and *Cronobacter* spp. detection by the **foodproof® *Salmonella* plus *Cronobacter* Detection LyoKit**.
- 1 sample (labelled “Sample for lactic acid bacteria enumeration”) for mesophilic lactic acid bacteria enumeration in MRS agar (pH 5.1).
- 1 water flask labelled “Temperature Control”.
- 1 probe which follows the temperature during shipping and sample storage.

Inoculation

The targeted inoculation levels were the following:

- Level: 0 CFU/25 g,
- Level 1: 2 CFU/25 g, inoculation level providing fractional positive recovery data,
- Level 2: 8 CFU/25 g.

Each level was inoculated in bulk and thoroughly mixed prior to repartition in sterile flasks (5g per sample). An additional amount of uninoculated matrix were then added to the flask (20 g for the reference and the alternative) The samples were then stored at room temperature for two weeks prior to testing.

The contamination level was determined by enumeration of the inoculum the day of the analysis using VRBG and by MPN enumeration of the inoculated bulk using ISO 6579-1 as described in the table below.

Matrix	Inoculum level	Large test Portion size	Medium test Portion size	Low test Portion size
Infant formula with probiotics	Low	5 x 10 g	8 x 5 g	5 x 2 g
	High	8 x 5 g	5 x 2 g	5 x 1 g

Labelling and shipping

Blind coded samples were express shipped to the different laboratories.

A temperature control flask and a sensor were added to the package to register the temperature profiles of the shipment during the transport, at reception and during the storage until analyses.

Samples were shipped to the involved laboratories. The temperature conditions had to stay between 18°C to 27°C (ambient temperature) during transport, and during the storage.

> *Analyses*

Collaborative study laboratories and the expert laboratory carried out the analyses on April 15th or 17th 2024 at the latest. The analyses by the reference method and the alternative method were performed on the same day.

4.3 Experimental parameters controls

4.3.1 Strain stability and background microflora stability

Strain stability was checked by the evaluating the bulk inoculated with *Salmonella* spp at the low level at different time point. Eight test portion per method (reference and alternative) were tested the day of inoculation, after 7 days and 14 days storage at ambient temperature. The lactic acid bacteria enumeration was also carried out, the results are given in Table 27.

Table 27 - Sample stability

Date of analysis	ISO 6579-1	Foodproof® Sal/Cro (*Salmonella*)	Lactic Flora
	Nb of positives	Nb of positives	CFU/g
D+0	5/8	4/8	5.6×10^6
D+7	3/8	6/8	6.7×10^6
D+14 (April 15th)	4/8	3/8	7.7×10^6

No evolution was observed during storage at 18 - 27°C.

4.3.2 Contamination levels

The contamination levels and the sample codification were the following (see Table 28). The contamination was determined by MPN and enumeration of the inoculum (lyophilized strain) the day of the analysis.

Table 28 - Contamination levels

Level	Samples	Theoretical target level (CFU/25g)	MPN (CFU/25g)	VRBG enumeration (CFU/25g)
0	1-4-7-8-13-16-21-24	0	0	0
	27-29-30-36-37-42-44-48			
1	2-3-6-10-14-15-19-23	2	0.6 [0.1; 1.3]	1.0
	28-32-33-34-38-43-45-46			
2	5-9-11-12-17-18-20-22	8	2.0 [1.2; 4.6]	3.3
	25-26-31-35-39-40-41-47			

The measurement of the inoculum (lyophilized strain) is consistent with the measured MPN values, indicating a correct homogeneity of the bulk. Note that the observed inoculation levels comply with the SO 16140-2: 2016 requirement.

4.3.3 Logistic conditions

Temperature conditions are given in Table 29.

Table 29 - Sample temperatures at receipt

Collaborators	Maximum temperature measured		Receipt date and time		Analysis date
	by the probe (°C)	at receipt (°C)			
A	19.9°C	20.2°C	11/04/2024	11h00	16/04/2024
B	20.5°C	19.8°C	11/04/2024	13h00	16/04/2024
C	18.1°C	15.0°C	12/04/2024	11h00	16/04/2024
D1	19.8°C	17.1°C	11/04/2024	11h10	16/04/2024
D2	20.0°C	17.7°C	11/04/2024	11h10	16/04/2024
E	20.3°C	16.9°C	11/04/2024	12h00	16/04/2024
F	21.8°C	19.7°C	11/04/2024	12h15	16/04/2024
G	19.5°C	19.9°C	11/04/2024	13h30	15/04/2024
H	20.3°C	17.2°C	11/04/2024	13h51	16/04/2024
I	21.6°C	22.1°C	11/04/2024	14h30	16/04/2024
J1	14.8°C	13.3°C	11/04/2024	10h00	16/04/2024
J2	15.9°C	13.9°C	11/04/2024	10h00	16/04/2024
K	22.0°C	20.6°C	15/04/2024	9h35	16/04/2024
L	15.7°C	16.3°C	11/04/2024	14h12	16/04/2024
M	20.5°C	20.9°C	11/04/2024	13h30	17/04/2024
N	Out of order	17.8°C	12/04/2024	9h46	15/04/2024

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

For one collaborator (lab C), while samples were delivered in good condition, the samples were stored at 5°C instead of room temperature before analysis. This lab will be therefore removed from the analysis.

For another participant (lab N), the probe was out of order, and it was not possible to obtain a record, but the flask showed appropriate temperature at reception and samples were received on time.

4.4 Results analysis

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

4.4.1 Expert laboratory results

The results obtained by the expert laboratory are given in Table 30.

Table 30 – Results obtained by the expert Lab.

Level	Reference method	Alternative method			
		Foodproof StarPrep Three kit		BAX Lysis	
		BAX Q7	LC480	BAX Q7	LC480
L0	0/8	0/8	0/8	0/8	0/8
L1	4/8	2/8	2/8	2/8	2/8
L2	8/8	6/8	6/8	6/8	6/8

Results were consistent between the PCR and confirmation results as well as between sample preparation kits and instruments. Fractional recovery is fulfilled at both inoculation levels, confirming the study was properly managed to comply with the ISO 16140-2 requirements.

4.4.2 Results observed by the collaborative laboratories

> ***Lactic flora enumeration***

Depending on the Lab results, the enumeration levels varied from > 3 x 10^5 to 1.7 x 10^7 CFU/g.

Table 31 – Lactic flora enumeration

Collaborator	Lactic flora CFU/g	Analysis date
A	>3 x 10^5 CFU /g	16/04/2024
B	1.33 x 10^7 CFU g	16/04/2024
C	6.6 x 10^6 CFU /g	16/04/2024
D1	8.7 x 10^6 CFU /g	16/04/2024
D2	9.5 x 10^6 CFU /g	16/04/2024
E	1.3 x 10^7 CFU /g	16/04/2024
F	1.09 x 10^7 CFU /g	16/04/2024
G	1.7 x 10^7 CFU /g	15/04/2024
H	1.0 x 10^7 CFU /g	16/04/2024
I	1.34 x 10^7 CFU /g	16/04/2024
J1	4.8 x 10^5 CFU /g	16/04/2024
J2	4.7 x 10^5 CFU/g	16/04/2024
K	1.2 x 10^7 CFU/g	16/04/2024
L	9.2 x 10^6 CFU/g	16/04/2024
M	1.04 x 10^7 CFU/g	17/04/2024
N	9.0 x 10^6 CFU/g	15/04/2024

Salmonella spp. detection

16 collaborators participated to the study. The results obtained are provided in Table 32 (reference method) and Table 33 (alternative method).

Table 32 - Positive results by the reference method
(All collaborators)

Collaborator	Contamination level		
	L0	L1	L2
A	0	5	5
B	0	3	8
C	1	4	7
D1	0	6	6
D2	1	1	6
E	0	3	6
F	0	3	7
G	1	2	8
H	3	5	8
I	0	3	6
J1	0	1	5
J2	0	2	7
K	0	4	6
L	0	1	7
M	0	1	7
N	3	7	7
TOTAL	$P_0 = 9$	$P_1 = 51$	$P_2 = 106$

Table 33 - Positive results (before and after confirmation) by the alternative method (All collaborators)

Collaborators	Contamination level								
	L0			L1			L2		
	Before confirmation	*Confirmation*	*Final result*	*Before confirmation*	*Confirmation*	*Final result*	*Before confirmation*	*Confirmation*	*Final result*
A	1	1	1	6	6	6	7	7	7
B	0	0	0	3	3	3	6	6	6
C	0	1	0	5	5	5	8	8	8
D1	1	0	0	4	4	4	8	8	8
D2	0	0	0	4	4	4	5	5	5
E	0	0	0	1	1	1	8	8	8
F	0	0	0	4	4	4	6	6	6
G	4	6	3	6	8	6	8	8	8
H	0	6	0	1	5	1	7	8	7
I	0	0	0	3	3	3	8	8	8
J1	0	0	0	3	3	3	5	4	4
J2	7	0	0	7	4	4	8	7	7
K	0	0	0	5	5	5	8	8	8
L	0	0	0	5	5	5	5	5	5
M	0	0	0	4	4	4	6	6	6
N	2	0	0	3	3	3	8	7	7
TOTAL	**P_0 = 15**	**C_0 = 14**	**CP_0 = 4**	**P_1 = 64**	**C_1 = 67**	**CP_1 = 61**	**P_2 = 111**	**C_2 = 109**	**CP_2 = 108**

For some participants, contamination was observed at level 0, either in PCR or during the confirmation step indicating an issue during the handling of the samples. These cross-contaminations are not correlated with a particular extraction method. According to the AFNOR technical rules, it is possible to include the results from a collaborator with maximum one cross contamination at Level 0 per method. For this study, this rule was applied and collaborator G, H, J2 and N were removed.

Interestingly, applying the same rules also led to the removal of laboratories in the *Cronobacter* spp. study (except for lab N), which may suggest the likelihood of cross-contaminations. As described in paragraph 3.2.3, Lab C will be also removed due to wrong storage condition prior to analysis.

4.4.3 Results of the collaborators retained for interpretation

The results obtained with the 11 labs kept for interpretation are presented in Table 34 (reference method) and Table 35 (alternative method).

Table 34 - Positive results by the reference method
(Without Labs C, G, H, J2, N)

Collaborators	Contamination level		
	L0	L1	L2
A	0	5	5
B	0	3	8
D1	0	6	6
D2	1	1	6
E	0	3	6
F	0	3	7
I	0	3	6
J1	0	1	5
K	0	4	6
L	0	1	7
M	0	1	7
TOTAL	$P_0 = 1$	$P_1 = 31$	$P_2 = 69$

Table 35 - Positive results (before and after confirmation) by the alternative method (Without Labs C, G, H, J2, N)

Collabo-rators	Contamination level								
	L0			L1			L2		
	Before confirmation	*Confirmation*	*Final result*	*Before confirmation*	*Confirmation*	*Final result*	*Before confirmation*	*Confirmation*	*Final result*
A	1	1	1	6	6	6	7	7	7
B	0	0	0	3	3	3	6	6	6
D1	1	0	0	4	4	4	8	8	8
D2	0	0	0	4	4	4	5	5	5
E	0	0	0	1	1	1	8	8	8
F	0	0	0	4	4	4	6	6	6
I	0	0	0	3	3	3	8	8	8
J1	0	0	0	3	3	3	5	4	4
K	0	0	0	5	5	5	8	8	8
L	0	0	0	5	5	5	5	5	5
M	0	0	0	4	4	4	6	6	6
TOTAL	$P_0 = 1$	$C_0 = 1$	$CP_0 = 1$	$P_1 = 42$	$C_1 = 42$	$CP_1 = 42$	$P_2 = 72$	$C_2 = 71$	$CP_2 = 71$

Most of the results were consistent between the PCR and confirmation.

Only two presumptive positive results were found for D1 at level 0 and for J1 at level 2 with very late positive Cq values. After repetition of the PCR twice for J1, no positive was found, suggesting possible cross contamination or interference during the initial test.

4.5 Calculation and interpretation

4.5.1 Calculation of the specificity percentage (SP)

The Specificity percentage (SP) of the reference method and of the alternative method, using the data after confirmation, based on the results of level L0 are presented in Table 36.

Table 36 - Specificity percentage (Without Labs C, G, H, J2, N)

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

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

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

Fractional positive results were obtained for the low inoculation levels (L1) with respectively 35 % for the reference method and 48 % for the alternative method. Only one inoculation level was retained for calculation.

A summary of the results of the collaborators retained for interpretation, obtained with the reference and the alternative methods for Level 1 is provided in Table 37.

Table 37 - Summary of the obtained results with the reference method and the alternative method for Level 1 (Without Labs C, G, H, J2, N)

Level	Response	Reference method positive (R+)	Reference method negative (R-)
1	**Alternative method positive (A+)**	Positive agreement (A+/R+) **PA = 14**	Positive deviation (R-/A+) **PD = 28**
	Alternative method negative (A-)	Total Negative deviation (A-/R+) **TND = 17 (0 $ND_{FN(alt)}$)**	Total Negative agreement (A-/R-) **TNA = 29 (0 $NA_{FN(alt)}$)**

Based on the data summarized in Table 37, the calculated values of the sensitivity of the alternative and reference methods, as well as the relative trueness and false

positive ratio and false negative ratio for the alternative method (taking account the confirmations) are presented in Table 38.

Table 38 - Sensitivity, relative trueness, false positive and false negative ratio percentages (Without Labs C, G, H, J2, N)

		Level 1
Sensitivity for the alternative method	$SE_{alt} = \frac{(PA + PD)}{(PA + TND + PD)} x\ 100\ \%$	71.2 %
Sensitivity for the reference method	$SE_{ref} = \frac{(PA + TND)}{(PA + TND + PD)} x\ 100\ \%$	52.5 %
Relative trueness	$RT = \frac{(PA + TNA)}{N} x100\ \%$	48.9 %
False positive ratio for the alternative method (unpaired evaluation)	$FPR = \frac{PA_{FP(alt)} + PD_{FP\,(alt)}}{TNA} x\ 100\ \%$	0.0 %
False negative ratio for the alternative method (unpaired evaluation)	$FNR = \frac{NA_{FN(alt)} + ND_{FN(alt)}}{PA + TND + PD} x\ 100\ \%$	0.0 %

4.5.3 Interpretation of data

The negative deviations are listed in Table 39 for Level 1 and in Table 40 for Level 2. The positive deviations are listed in Table 41 for Level 1 and in Table 42 for Level 2.

Table 39 - Negative deviations for Level 1 (Without Labs C, G, H, J2, N)

Lab	Sample N°	Results foodproof® Salmonella plus Cronobacter Detection LyoKit - 5'Nuclease - *Salmonella*	Confirmation	Extraction kit	Thermocycler
A	**6**	-	-	BAX Lysis	Lightcycler480
A	**23**	-	-	BAX Lysis	Lightcycler480
B	**3**	-	-	BAX Lysis	BAX Q7
D1	**6**	-	-	BAX Lysis	BAX Q7
D1	**10**	-	-	BAX Lysis	BAX Q7
D1	**15**	-	-	BAX Lysis	BAX Q7
D1	**19**	-	-	BAX Lysis	BAX Q7
E	**14**	-	-	foodproof® StarPrep Three Kit	Lightcycler480
E	**15**	-	-	foodproof® StarPrep Three Kit	Lightcycler480
E	**23**	-	-	foodproof® StarPrep Three Kit	Lightcycler480
F	**6**	-	-	foodproof® StarPrep Three Kit	Lightcycler480
F	**10**	-	-	foodproof® StarPrep Three Kit	Lightcycler480
I	**3**	-	-	foodproof® StarPrep Three Kit	Lightcycler480
J1	**10**	-	-	foodproof® StarPrep Three Kit	BAX Q7
K	**23**	-	-	foodproof® StarPrep Three Kit	BAX Q7
L	**6**	-	-	BAX Lysis	Lightcycler480
M	**23**	-	-	BAX Lysis	Lightcycler480

The observed negative deviations are not associated with any specific laboratory, extraction protocol, or thermocycler.
No false negative results were observed.

Table 40 - Positive deviations for Level 1 (Without Labs C, G, H, J2, N)

Lab	Sample N°	Results foodproof® Salmonella plus Cronobacter Detection LyoKit - 5'Nuclease - *Salmonella*	Confirmation	Extraction kit	Thermocycler
A	**2**	+ (20.44)	+	BAX Lysis	Lightcycler480
A	**15**	+ (28.60)	+	BAX Lysis	Lightcycler480
A	**19**	+ (19.51)	+	BAX Lysis	Lightcycler480
B	**23**	+ (24.2)	+	BAX Lysis	BAX Q7
D1	**2**	+ (31.0)	+	BAX Lysis	BAX Q7
D1	**23**	+ (30.0)	+	BAX Lysis	BAX Q7
D2	**32**	+ (30.9)	+	BAX Lysis	BAX Q7
D2	**33**	+ (32.1)	+	BAX Lysis	BAX Q7
D2	**38**	+ (30.8)	+	BAX Lysis	BAX Q7
E	**19**	+ (25.98)	+	foodproof® StarPrep Three Kit	Lightcycler480
F	**2**	+ (25.84)	+	foodproof® StarPrep Three Kit	Lightcycler480
F	**15**	+ (32.94)	+	foodproof® StarPrep Three Kit	Lightcycler480
F	**19**	+ (37.77)	+	foodproof® StarPrep Three Kit	Lightcycler480
I	**19**	+ (26.01)	+	foodproof® StarPrep Three Kit	Lightcycler480
J1	**2**	+ (31.4)	+	foodproof® StarPrep Three Kit	BAX Q7
J1	**3**	+ (23.3)	+	foodproof® StarPrep Three Kit	BAX Q7
J1	**14**	+ (23.0)	+	foodproof® StarPrep Three Kit	BAX Q7
K	**6**	+ (26.4)	+	foodproof® StarPrep Three Kit	BAX Q7
K	**14**	+ (21.2)	+	foodproof® StarPrep Three Kit	BAX Q7
L	**2**	+	+	BAX Lysis	Lightcycler480
L	**3**	+	+	BAX Lysis	Lightcycler480
L	**14**	+	+	BAX Lysis	Lightcycler480
L	**19**	+	+	BAX Lysis	Lightcycler480
L	**23**	+	+	BAX Lysis	Lightcycler480
M	**2**	+ (19.85)	+	BAX Lysis	Lightcycler480
M	**3**	+ (23.52)	+	BAX Lysis	Lightcycler480
M	**6**	+ (19.05)	+	BAX Lysis	Lightcycler480
M	**10**	+ (19.37)	+	BAX Lysis	Lightcycler480

The observed positive detections are not associated with any specific laboratory, extraction protocol, or thermocycler.

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

$$(p+)_{ref} = \frac{P_{x\,(ref)}}{N_{x\,(ref)}}$$

where

$P_{x(ref)}$ = is number of samples with a positive result obtained with the reference method at level x (L_1 or L_2) for all laboratories

$N_{x(ref)}$ = is number of samples tested at level x (L_1 or L_2) with the reference method by all laboratories

$$(p+)_{alt} = \frac{CP_{x\,(alt)}}{N_{x\,(alt)}}$$

where

$CP_{x(alt)}$ = is number of samples with a confirmed positive result obtained with the alternative method at level x (L_1 or L_2) for all laboratories

$N_{x(alt)}$ = is number of samples tested at level x (L_1 or L_2) with the alternative method by all laboratories

$$(TND - PD)_{max} = \sqrt{3N_{x\,(ref)}\; x\; ((p+)_{ref} + (p+)_{alt} - 2((p+)_{ref}\; x\; (p+)_{alt}))}$$

where

$N_{x(ref)}$ = is number of samples tested for level x (L_1 or L_2) with the reference method by all laboratories.

The AL is not met when the observed value (TND - PD) 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 reason(s) 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. The calculations are the following, according to the ISO 16140-2 (See Table 41).

Table 41 – Calculations (Without Labs C, G, H, J2, N)

	Level 1
N_X	88
$(p+)_{ref}$	0.35
$(p+)_{alt}$	0.48
AL = (TND - PD) max	11.41
TND - PD	-11
Conclusion	PASS

The ISO 16140-2 requirements are fulfilled as (TND - PD) meet the AL.

4.5.4 Evaluation of the LOD_{50} and RLOD between laboratories

The LOD $_{50\%}$ was calculated using the ISO 16140-2 Excel spreadsheet available at https://standards.iso.org/iso/16140/-2/ed-1/en/amd/1/PODLOD-interlab_ver2.xlsm.

The RLOD is defined as the ratio of the LODs of the alternative method and the reference method: **RLOD = LOD_{alt}/LOD_{ref}**. The results are given in Table 42.
The calculation does not take into account laboratories A and D2 as positive results were obtained at level 0 for those participants.

Table 42 - LOD $_{50\%}$ and RLOD (Without Labs A, C, D2, G, H, J2, N)

Method	LOD 50%	RLOD
Reference	0.891 [0.693 - 1.146]	0.891
Alternative	0.794 [0.620 - 1.017]	

5 CONCLUSION

The **method comparison study conclusions** are:

- The method comparison study scheme corresponds to a paired study design as the alternative and reference methods have a common enrichment procedure except for infant formula with probiotics for which an unpaired study design was used (addition of vancomycin in the alternative method and BPW2x for the reference method were used).
- In the sensitivity study, 2 categories were tested: Infant formula with or without probiotics and related ingredients and the production environmental samples.
- The alternative method shows 3 positive deviations (PD) and 2 negative deviations (ND) for all combined categories and protocols. The TND - PD meet the acceptability limits (AL) for each individual categories as well as for the two combined categories.
- The Relative Levels of Detection (RLOD) meet the AL fixed at 1.5 for the paired study and 2.5 for the unpaired study.
- The inclusivity and exclusivity testing gave the expected results for the 100 target strains and the 30 non-target strains.
- It is possible to store the primary enrichment broth for 72 h at 5 ± 3°C.
- The alternative method allows a one-day screening of the negative samples.

- The results of the method comparison study fulfil all the ISO 16140-2, IOS 16140-2/A1 and AFNOR technical rules (Revision 12).

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

- The interlaboratory study on *Salmonella* spp. was performed as an unpaired study design on 25 g Infant formula with probiotics including a co-inoculation with *Cronobacter* spp.

- Five laboratories were removed from the analysis due to cross-contamination at level 0 or inadequate storage temperature of the samples.

- The TND-PD results meet the AL calculated for the retained laboratories.

These data and interpretations comply with the ISO 16140-2 requirements. **The foodproof® Salmonella plus Cronobacter Detection LyoKit is considered equivalent to the ISO standard method for *Salmonella* spp detection.**

During method development, the manufacturer assessed whether a high level of one target would interfere with the accurate and reliable detection of the other, even at low levels, and confirmed that no interference occurred.

Quimper, 17 December 2025

Florian QUERO
Technical Study Manager
Method performance in food microbiology

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

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 diagrams of the alternative method: foodproof® *Salmonella* plus *Cronobacter* Detection LyoKit

foodproof® StarPrep Three kit

X g + 9 X ml pre-warmed **BPW or**
BPW + vancomycin (10 mg/L) for samples containing probiotics.

1 swab + 10 ml[2]
1 sponge + 100 ml
1 wipe + 225 ml

↓

16-24 h at 37°C ± 1°C
It is possible to store the enrichment broth for 72 h at 5°C ± 3°C

↓

Shake the enrichment gently and let settle 5 - 10 min

↓

Transfer **100 µl** of enrichment supernatant to the reaction tube

↓

Centrifuge 5 min at 8 000 g

↓

Remove supernatant carefully with a pipette immediately after centrifugation

↓

Add **200 µl** lysis Buffer
Mix by pipetting up and down until pellet has completely resuspended

↓

Incubate 10 min at 95-100°C in the Heating Block

↓

Let cool at 15 - 25°C for 1 min
Mix for 2 sec

↓

Centrifuge 2 min at 13 000 g

↓

PCR on **25 µl** supernatant with **food**proof® *Salmonella* plus *Cronobacter* Detection LyoKit
or store DNA at -15 to -25°C

↓

Confirmation using the protocol described
in the ISO 6579-1 (*Salmonella* spp. detection) reference method

[2] For sampling after cleaning process, premoisten:
- 1 swab + 1 ml broth universal neutralizing (+ 9 ml BPW broth)
- 1 sponge + 10 ml broth universal neutralizing (+ 90 ml BPW broth)
- 1 wipe + BPW + 10 % neutralizing agent (+ 225 ml BPW broth)

foodproof® StarPrep Three 8-Strip Kit

X g + 9 X ml pre-warmed **BPW or**
BPW + vancomycin (10 mg/L) for samples containing probiotics

1 swab + 10 ml[3]
1 sponge + 100 ml
1 wipe + 225 ml

↓

16 - 24 h at 37°C ± 1°C
It is possible to store the enrichment broth for 72 h at 5°C ±3°C

↓

Shake enrichment culture gently and let settle for 5 - 10 min

↓

Transfer **100 µl** of enrichment culture supernatant to the 8-tube strips

↓

Seal the tubes with sterile cap strips

↓

Centrifuge 10 min at 5 400 x g or 25 min at 2 000 x g

↓

Remove and discard the 8-cap strips from the 8-tube strips

↓

Remove supernatant carefully with a multichannel pipette

↓

Transfer required Lysis Buffer to a sterile reservoir, 200 µL per sample and 1 mL lysis buffer as dead volume.
Add **200 µl** Lysis Buffer with a multichannel pipette to each 8-tube strip
Resuspend pellet by pipetting up and down 5 to 10 times

↓

Seal tubes tightly with new sterile cap stripes
Remove the bottom of the tube rack, install incubation frame and incubate the rack with the tube strips 10-15 min at 95-100°C in the TH21 Heating Block Weight the caps down with the stainless-steel plate

↓

Remove the rack with the tube strips together with the stainless-steel plate
Let cool at 15 - 25°C for 3-5 min

↓

Reinstall the bottom of the tube rack and centrifuge the rack 5 min at 5 400 x g or 10 min at 2 000 x g

↓

PCR on **25 µl** supernatant with **food**proof® *Salmonella* plus *Cronobacter* Detection LyoKit
or store DNA at -15 to -25°C

↓

Confirmation using the protocol described
in the ISO 6579-1 (*Salmonella* spp. detection) reference method

[3] For sampling after cleaning process, premoisten:
- 1 swab + 1 ml broth universal neutralizing (+ 9 ml BPW broth)
- 1 sponge + 10 ml broth universal neutralizing (+ 90 ml BPW broth)
- 1 wipe + BPW + 10 % neutralizing agent (+ 225 ml BPW broth)

BAX Lysis

X g + 9 X ml pre-warmed **BPW or**
BPW + vancomycin (10 mg/L) for samples containing probiotics

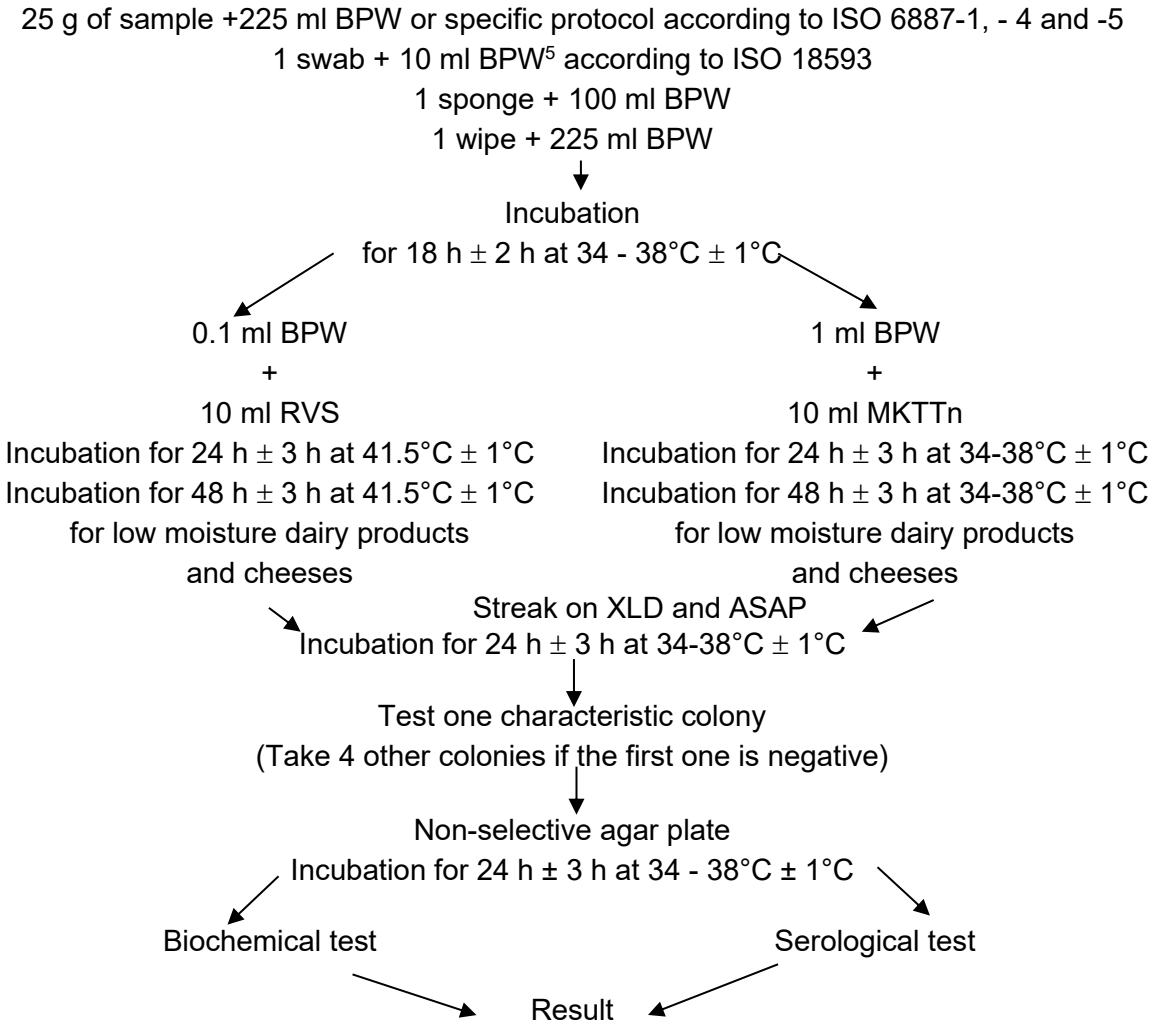
1 swab + 10 ml[4]
1 sponge + 100 ml
1 wipe + 225 ml
↓
16 -24 h at 37°C ± 1°C
It is possible to store the enrichment broth for 72 h at 5°C ±3°C
↓
Shake enrichment culture gently and let settle for 5 - 10 min
↓
Prepare lysis reagent by adding 150 µL protease to one 12 mL bottle of lysis buffer
↓
Transfer **200 µL** lysis reagent to each cluster tube
↓
Transfer **20 µL** enrichment culture supernatant to the corresponding cluster tube
↓
Heat at 37°C for 20 minutes
↓
Heat at 95°C for 10 minutes
↓
Cool at 2-8°C at least 5 minutes
↓
PCR on **30 µl** supernatant with **food**proof® *Salmonella* plus *Cronobacter* Detection LyoKit
or store DNA at -15 to -25°C
↓
Confirmation using the protocol described
in the ISO 6579-1 (*Salmonella* spp. detection) reference method

[4] For sampling after cleaning process, premoisten:
- 1 swab + 1 ml broth universal neutralizing (+ 9 ml BPW broth)
- 1 sponge + 10 ml broth universal neutralizing (+ 90 ml BPW broth)
- 1 wipe + BPW + 10 % neutralizing agent (+ 225 ml BPW broth)

Appendix 2 – Flow diagram of the reference method:

- **ISO 6579-1:2017**: Microbiology of the food chain – Horizontal method for the detection, enumeration and serotyping of *Salmonella* – Part 1: detection of *Salmonella* spp.
- **ISO 6579-1/A1:2020**: Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* spp. - Part 1: detection of *Salmonella* spp. Amendment 1: Broader range of incubation temperatures, amendment to the status of Annex D, and correction of the composition of MSRV and SC

Food, and environmental samples:



[5] For sampling after cleaning process pre-moisten
- 1 swab + 1 ml broth universal neutralizing (+ 9 ml BPW)
- 1 sponge + 10 ml broth universal neutralizing (+ 90 ml BPW)
- 1 wipe + BPW + 10 % neutralizing agent (+ 225 ml BPW)

Appendix 3 – Artificial contamination of samples

Year of analysis	Sample N°	Product (french name)	Product	Artificial contamination						Global result *Salmonella* spp	Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample				
								Enumeration	Mean			
2022	**3561**	**Poudre de lait infantile, 6-12 mois, lait de suite, avec probiotiques (*B. infantis* 2,5.10⁶ UFC/g) (26%MG)**	**Infant milk powder, 6-12 months, with probiotics (B. infantis 2.5 x10⁶ CFU/g) (26% fat)**	*S.* Norwich Ad1172	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.3	+	1	a
2022	**3562**	**Poudre de lait infantile, 6-12 mois, avec probiotiques (*B. infantis* 3,2.10⁷ UFC/g) (23%MG)**	**Infant milk powder, 6-12 months, with probiotics (B. infantis 3.2 x 10⁷ CFU/g) (23%MG)**	*S.* Norwich Ad1172	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.3	+	1	a
2022	**3563**	**Poudre de lait infantile, 6-12 mois, avec probiotiques (*B. lactis* 1,8.10⁶ UFC/g) (26%MG)**	**Infant milk powder, 6-12 months, with probiotics (B. lactis 1.8 x 10⁶ CFU/g) (26%MG)**	*S.* Norwich Ad1172	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.3	+	1	a
2022	**3564**	**Poudre de lait infantile, dès 6 mois, avec probiotiques (*B. lactis* 3,5.10⁷ UFC/g) (26%MG)**	**Infant milk powder, from 6 months, with probiotics (B. lactis 3.5 x 10⁷ CFU/g) (26% fat)**	*S.* Norwich Ad1172	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.3	+	1	a
2022	**3565**	**Poudre de lait infantile, bébés gourmands, avec probiotiques (*B. lactis* 3,5.10⁷ UFC/g) (23,6%MG)**	**Infant milk powder, babies, with probiotics (B. lactis 3.5 x 10⁷ CFU/g) (23.6% fat)**	*S.* Norwich Ad1172	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.3	+	1	a
2022	3566	Poudre de lait infantile, 6-12 mois, lait de suite, avec probiotiques (*B. infantis* 2,5.10⁶ UFC/g) (26%MG)	Infant milk powder, 6-12 months, follow-on milk, with probiotics (B. infantis 2.5 x 10⁶ CFU/g) (26% fat)	*C. sakazakii* 95	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.8	-	1	a
2022	3567	Poudre de lait infantile, 6-12 mois, avec probiotiques (*B. infantis* 3,2.10⁷ UFC/g) (23%MG)	Infant milk powder, 6-12 months, with probiotics (B. infantis 3.2 x 10⁷ CFU/g) (23%MG)	*C. sakazakii* 95	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.8	-	1	a
2022	3568	Poudre de lait infantile, 6-12 mois, avec probiotiques (*B. lactis* 1,8.10⁶ UFC/g) (26%MG)	Infant milk powder, 6-12 months, with probiotics (B. lactis 1.8 x 10⁶ CFU/g) (26%MG)	*C. sakazakii* 95	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.8	-	1	a
2022	3569	Poudre de lait infantile, dès 6 mois, avec probiotiques (*B. lactis* 3,5.10⁷ UFC/g) (26%MG)	Infant milk powder, from 6 months, with probiotics (B. lactis 3.5 x 10⁷ CFU/g) (26% fat)	*C. sakazakii* 95	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.8	-	1	a
2022	3570	Poudre de lait infantile, bébés gourmands, avec probiotiques (*B. lactis* 3,5.10⁷ UFC/g) (23,6%MG)	Infant milk powder, babies, with probiotics (B. lactis 3.5 x 10⁷ CFU/g) (23.6% fat)	*C. sakazakii* 95	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.8	-	1	a
2022	**3797**	**Poudre de lait infantile, 3ème âge, avec probiotiques (*B. lactis* + *S. thermophilus* 1,5.10⁶ UFC/g) (30% MG)**	**Infant milk powder, 3rd age, with probiotics (B. lactis + S. thermophilus 1.5 x 10⁶ CFU/g) (30% fat)**	S. Ohio Ad2213 + *C. sakazakii* Ad935	Dairy product/Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.3/2.4	+	1	a
2022	**3798**	**Poudre de lait infantile, 3ème âge, avec probiotiques (*B. lactis* + *S. thermophilus* 1,5.10⁶ UFC/g) (30% MG)**	**Infant milk powder, 3rd age, with probiotics (B. lactis + S. thermophilus 1.5 x 10⁶ CFU/g) (30% fat)**	S. Duisburg Ad1812 + *C. sakazakii* Ad2407	Dairy product/Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<0.5/3.0	+	1	a
2022	**3799**	**Poudre de lait infantile, 2ème âge, avec probiotiques (*B. lactis* + *S. thermophilus* 3,1.10⁷ UFC/g) (23% MG)**	**Infant milk powder, 2nd age, with probiotics (B. lactis + S. thermophilus 3.1 x 10⁷ CFU/g) (23% fat)**	S. Ohio Ad2213 + *C. sakazakii* Ad935	Dairy product/Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.3/2.4	+	1	a
2022	**3800**	**Poudre de lait infantile, 2ème âge, avec probiotiques (*B. lactis* + *S. thermophilus* 3,1.10⁷ UFC/g) (23% MG)**	**Infant milk powder, 2nd age, with probiotics (B. lactis + S. thermophilus 3.1 x 10⁷ CFU/g) (23% fat)**	S. Duisburg Ad1812 + C. sakazakii Ad2382	Dairy product/Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<0.5/0.5	+	1	a

Year of analysis	Sample N°	Product (french name)	Product	Artificial contamination						Global result *Salmonella* spp	Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample				
								Enumeration	Mean			
2022	**3801**	**Poudre de lait infantile, 1er âge, avec probiotiques (*B. lactis 8,6.10*^{5} UFC/g) (26% MG)**	**Infant milk powder, 1st age, with probiotics (*B. lactis* 8.6 x 10^5 CFU/g) (26% fat)**	S. Ohio Ad2213 + *C. sakazakii* Ad935	Dairy product/Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.3/2.4	+	1	a
2023	**762**	**Poudre de lait infantile avec probiotiques, croissance dès 1 an (*L. reuteri* DSM 17938 8,55.10^4 UFC/g) (26% MG)**	**Infant milk powder with probiotics, 3rd age (*L. reuteri* DSM 17938 8.55 x 10^4 CFU/g) (26% fat)**	S. Montevideo 604	Dairy product	Spiking protocol, heat treatment 56°C 8 min	0.98	2-0-2-1-0	1.0	+	1	a
2023	763	Poudre de lait infantile avec probiotiques, croissance dès 1 an (*L. reuteri* DSM 17938 8,55.10^4 UFC/g) (26% MG)	Infant milk powder with probiotics, 3rd age (*L. reuteri* DSM 17938 8.55 x 10^4 CFU/g) (26% fat)	*C. malonaticus* DSM18702	Dairy product	Spiking protocol, heat treatment 56°C 8 min	1.13	1-1-3-2-2	1.8	-	1	a
2023	**764**	**Poudre de lait infantile avec probiotiques, système immunitaire dès 10 mois (*L. reuteri* DSM 17938 1,55.10^5 UFC/g) (23% MG)**	**Infant milk powder with probiotics, after 10 months (*L. reuteri* DSM 17938 1.55 x 10^5 CFU/g) (23% fat)**	S. Anatum Ad1166	Dairy product	Spiking protocol, heat treatment 56°C 8 min	1.17	0-2-2-0-1	1.0	+	1	a
2023	765	Poudre de lait infantile avec probiotiques, système immunitaire dès 10 mois (*L. reuteri* DSM 17938 1,55.10^5 UFC/g) (23% MG)	Infant milk powder with probiotics, from 10 months (*L. reuteri* DSM 17938 1.55 x 10^5 CFU/g) (23% fat)	*C. sakazakii* Ad898	Dairy product	Spiking protocol, heat treatment 56°C 8 min	0.95	3-1-2-2-0	1.6	-	1	a
2023	**766**	**Poudre de lait infantile avec probiotiques, 3ème âge dès 1 an (*L. reuteri* DSM 17938 8,24.10^4 UFC/g) (23,4% MG)**	**Infant milk powder with probiotics, 3rd age (*L. reuteri* DSM 17938 8.24 x 10^4 CFU/g) (23.4% fat)**	S. Ohio Ad2213	Dairy product	Spiking protocol, heat treatment 56°C 8 min	1.13	2-0-1-0-1	0.8	+	1	a
2023	767	Poudre de lait infantile avec probiotiques, 3ème âge dès 1 an (*L. reuteri* DSM 17938 8,24.10^4 UFC/g) (23,4% MG)	Infant milk powder with probiotics, 3rd age from 1 year (*L. reuteri* DSM 17938 8.24 x 10^4 CFU/g) (23.4% fat)	*C. sakazakii* Ad897	Dairy product	Spiking protocol, heat treatment 56°C 8 min	1.98	1-1-4-0-1	1.4	-	1	a
2023	**768**	**Poudre de lait infantile avec probiotiques, bio dès 6 mois (*L. reuteri* DSM 17938 2,45.10^6 UFC/g) (26% MG)**	**Infant milk powder with probiotics, organic from 6 months (*L. reuteri* DSM 17938 2.45 x 10^6 CFU/g) (26% fat)**	S. Anatum Ad1166	Dairy product	Spiking protocol, heat treatment 56°C 8 min	1.17	0-2-2-0-1	1.0	-	1	a
2023	769	Poudre de lait infantile avec probiotiques, bio dès 6 mois (*L. reuteri* DSM 17938 2,45.10^6 UFC/g) (26% MG)	Infant milk powder with probiotics, organic from 6 months (*L. reuteri* DSM 17938 2.45 x 10^6 CFU/g) (26% fat)	*C. malonaticus* DSM18702	Dairy product	Spiking protocol, heat treatment 56°C 8 min	1.13	1-1-3-2-2	1.8	-	1	a
2023	**770**	**Poudre de lait infantile avec probiotiques,1er âge pour nourrisson 0-6 mois (*L. fermentum hereditum* 5,09.10^6 UFC/g) (24% MG)**	**Infant milk powder with probiotics, 1st age for infant 0-6 months (*L. fermentum hereditum* 5.09 x 10^6 CFU/g) (24% fat)**	S. Ohio Ad2213	Dairy product	Spiking protocol, heat treatment 56°C 8 min	1.13	2-0-1-0-1	0.8	+	1	a
2023	771	Poudre de lait infantile avec probiotiques,1er âge pour nourrisson 0-6 mois (*L. fermentum hereditum* 5,09.10^6 UFC/g) (24% MG)	Infant milk powder with probiotics, 1st age for infant 0-6 months (*L. fermentum hereditum* 5.09 x 10^6 CFU/g) (24% fat)	*C. sakazakii* Ad898	Dairy product	Spiking protocol, heat treatment 56°C 8 min	0.95	3-1-2-2-0	1.6	-	1	a
2023	**772**	**Poudre de lait infantile avec probiotiques, formule épaissie dès 6 mois (*L. fermentum hereditum* 3,09.10^6 UFC/g) (26% MG)**	**Infant milk powder with probiotics, formula thickened from 6 months (*L. fermentum hereditum* 3.09 x 10^6 CFU/g) (26% fat)**	S. Montevideo 604	Dairy product	Spiking protocol, heat treatment 56°C 8 min	0.98	2-0-2-1-0	1.0	+	1	a
2022	**2903**	**Poudre de lait infantile, 0-6 mois (23,5%MG)**	**Infant formula. 0-6 months (23.5% fat)**	S. Goldcoast Ad3006	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<0.4	+	1	b

Year of analysis	Sample N°	Product (french name)	Product	Artificial contamination						Global result *Salmonella* spp	Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample				
								Enumeration	Mean			
2022	**2904**	**Poudre de lait infantile, 6-12 mois (22,6%MG)**	**Infant formula. 6-12 months (22.6% fat)**	S. Goldcoast Ad3006	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<0.4	+	1	b
2022	**2905**	**Poudre de lait infantile bio, 6-12 mois (23,1%MG)**	**Organic infant formula. 6-12 months (23.1% fat)**	S. Goldcoast Ad3006	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<0.4	+	1	b
2022	**2906**	**Poudre de lait infantile, 2ème âge, 6-12 mois (26,0%MG)**	**Infant formula. stage 2. 6-12 months (26.0% fat)**	S. Goldcoast Ad3006	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<0.4	+	1	b
2022	**2907**	**Poudre de lait infantile, 2ème âge, dès 6 mois (22,0%MG)**	**Infant formula. stage 2.from 6 months (22.0% fat)**	S. Enteritidis Ad3880	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.2	+	1	b
2022	**2908**	**Poudre de lait infantile, 2ème âge, 6-12 mois (22,0%MG)**	**Infant formula. stage 2. 6-12 months (22.0% fat)**	S. Enteritidis Ad3880	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.2	-	1	b
2022	**2909**	**Poudre de lait infantile, 2ème âge, 6 mois-1an (23,6%MG)**	**Infant formula. stage 2. 6months-1year (23.6% fat)**	S. Enteritidis Ad3880	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.2	+	1	b
2022	**2910**	**Poudre de lait infantile, 2ème âge, 6-12 mois (21,1%MG)**	**Infant formula. stage 2. 6-12 months (21.1% fat)**	S. Enteritidis Ad3880	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.2	+	1	b
2022	2963	Poudre de lait infantile, 1er âge, 6-12 mois (22,0%MG)	Infant formula. stage 1. 6-12 months (22.0% fat)	*C. sakazakii* Ad2413	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.1	-	1	b
2022	2964	Poudre de lait infantile bio, 0-6 mois (24,0%MG)	Organic infant formula. 0-6 months (24.0% fat)	*C. sakazakii* Ad2413	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.1	-	1	b
2022	2965	Poudre de lait infantile bio, 0-6 mois (24,0%MG)	Organic infant formula. 0-6 months (24.0% fat)	*C. turicensis* Ad1445	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.0	-	1	b
2022	2966	Poudre de lait infantile, 0-6 mois (22,0%MG)	Infant formula. 0-6 months (22.0% fat)	*C. turicensis* Ad1445	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.0	-	1	b
2022	2967	Poudre de lait infantile, 0-6 mois (21,0%MG)	Infant formula. 0-6 months (21.0% fat)	*C. turicensis* Ad1445	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.0	-	1	b
2022	2968	Poudre de lait infantile, 2ème âge, 6-12 mois (26,0%MG)	Infant formula. stage 2. 6-12 months (26.0% fat)	*C. sakazakii* Ad2413	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.1	-	1	b
2022	2969	Poudre de lait infantile bio, après 6 mois (25,0%MG)	Organic infant formula. from 6 months (25.0% fat)	*C. sakazakii* Ad2413	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.1	-	1	b
2022	2970	Poudre de lait infantile bio, 6-12mois (22,0%MG)	Organic infant formula. 6-12 months (22.0% fat)	*C. turicensis* Ad1445	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.0	-	1	b

Year of analysis	Sample N°	Product (french name)	Product	Artificial contamination						Global result *Salmonella* spp	Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample				
								Enumeration	Mean			
2022	**3023**	**Poudre de lait infantile anti-régurgitations, 0-6 mois (25% MG)**	**Infant formula anti regurgitation. 0-6 months (25.0% fat)**	S. Anatum Ad2718 + *C. muytjensii* E888	Dairy product/Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<1.0/0.5	+	1	b
2022	**3024**	**Poudre de lait infantile bio, 2ème âge, 6-12 mois (25%MG)**	**Organic infant formula. stage 2. 6-12 months (25.0% fat)**	S. Anatum Ad2718 + *C. muytjensii* E888	Dairy product/Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<1.0/0.5	+	1	b
2022	**3025**	**Poudre de lait infantile, bébés gourmands, 6-12 mois (26%MG)**	**Infant milk powder. gourmet babies. 6-12 months (26% fat)**	S. Anatum Ad2718 + *C. muytjensii* E888	Dairy product/Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<1.0/0.5	+	1	b
2022	**3026**	**Poudre de lait infantile, 6-12 mois (25,5%MG)**	**Infant milk powder. 6-12 months (25.5% fat)**	S. Cerro Ad2707 + C. sakazakii Ad935	Dairy product/Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	3.6/3.0	+	1	b
2022	**3027**	**Poudre de lait infantile bio, 2ème âge (25%MG)**	**Organic infant milk powder. 2nd age (25%fat)**	S. Cerro Ad2707 + C. sakazakii Ad935	Dairy product/Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	3.6/3.0	+	1	b
2022	**3028**	**Poudre de lait infantile premium, 0-6 mois (24,7%MG)**	**Premium infant milk powder. 0-6 months (24.7% fat)**	S. Cerro Ad2707 + C. sakazakii Ad935	Dairy product/Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	3.6/3.0	+	1	b
2022	**3083**	**Amidon de riz**	**Rice starch**	S. Kasenyii Ad2921	Vegetable product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.9	+	1	c
2022	**3084**	**Amidon de maïs**	**Corn starch**	S. Kasenyii Ad2921	Vegetable product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.9	+	1	c
2022	**3085**	**Maltodextrine**	**Maltodextrin**	S. Livingstone Ad2705	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.1	+	1	c
2022	**3086**	**Lactoserum**	**Whey**	S. Livingstone Ad2705	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.1	+	1	c
2022	**3087**	**Lactoserum**	**Whey**	S. Livingstone Ad2705	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.1	+	1	c
2022	**3088**	**Maltodextrine**	**Maltodextrin**	S. Kasenyii Ad2921	Vegetable product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.9	+	1	c
2022	3089	Amidon de riz	Rice starch	*C. sakazakii* Ad2341	Vegetable product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<0.5	-	1	c

Year of analysis	Sample N°	Product (french name)	Product	Artificial contamination						Global result *Salmonella* spp	Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample				
								Enumeration	Mean			
2022	3090	Amidon de maïs	Corn starch	*C. sakazakii* Ad2341	Vegetable product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<0.5	-	1	c
2022	3091	Maltodextrine	Maltodextrin	*C. muytjensii* E888	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.2	-	1	c
2022	3092	Lactoserum	Whey	*C. muytjensii* E888	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.2	-	1	c
2022	3093	Lactoserum	Whey	*C. muytjensii* E888	Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.2	-	1	c
2022	3094	Maltodextrine	Maltodextrin	*C. sakazakii* Ad2341	Vegetable product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	<0.5	-	1	c
2022	**3175**	**Lactose**	**Lactose**	S. Anatum Ad2718 + *C. sakazakii* Ad2413	Dairy product/Milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	3.9	+	1	c
2022	**3176**	**Lactose**	**Lactose**	S. Anatum Ad2718 + *C. turicensis* Ad1445	Dairy Product/milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	3.9	+	1	c
2022	**3177**	**Lactoserum**	**Whey**	S. Cerro Ad2707 + *C. sakazakii* Ad2413	Dairy Product/milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.8	+	1	c
2022	**3178**	**Amidon de blé**	**Wheat starch**	S. Anatum Ad2718 + *C. sakazakii* Ad2848	Dairy product / infant cereals	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	3.9	+	1	c
2022	**3179**	**Maltodextrine**	**Maltodextrin**	S. Cerro Ad2707 + *C. turicensis* Ad1445	Dairy Product/milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.8	+	1	c
2022	**3180**	**Protéines concentrées de lactosérum**	**Whey Protein Concentrate**	S. Cerro Ad2707 + *C. turicensis* Ad1445	Dairy Product/milk powder	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.8	+	1	c
2022	**3396**	**Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)**	**Floor surface swabs before cleaning (dairy industry)**	S. Livingstone Ad2702	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	2-2-1-1-2	1.6	-	2	a
2022	**3397**	**Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)**	**Floor surface swabs before cleaning (dairy industry)**	S. Livingstone Ad2702	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	2-2-1-1-2	1.6	+	2	a
2022	**3398**	**Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)**	**Floor surface swabs before cleaning (dairy industry)**	S. Livingstone Ad2702	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	2-2-1-1-2	1.6	+	2	a
2022	3399	Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)	Floor surface swabs before cleaning (dairy industry)	*C. sakazakii* Ad2409	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	1-4-3-0-0	1.6	-	2	a
2022	3400	Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)	Floor surface swabs before cleaning (dairy industry)	*C. sakazakii* Ad2409	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	1-4-3-0-0	1.6	-	2	a
2022	3401	Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)	Floor surface swabs before cleaning (dairy industry)	*C. sakazakii* Ad2409	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	1-4-3-0-0	1.6	-	2	a
2022	3402	Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)	Floor surface swabs before cleaning (dairy industry)	*C. sakazakii* Ad2409	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	1-4-3-0-0	1.6	-	2	a

Year of analysis	Sample N°	Product (french name)	Product	Artificial contamination						Global result *Salmonella* spp	Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample				
								Enumeration	Mean			
2022	**3403**	**Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)**	**Floor surface swabs before cleaning (dairy industry)**	S. Derby A00E084	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	3-2-0-2-0	1.4	+	2	a
2022	**3404**	**Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)**	**Floor surface swabs before cleaning (dairy industry)**	S. Derby A00E084	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	3-2-0-2-0	1.4	-	2	a
2022	**3405**	**Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)**	**Floor surface swabs before cleaning (dairy industry)**	S. Derby A00E084	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	3-2-0-2-0	1.4	-	2	a
2022	**3406**	**Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)**	**Floor surface swabs before cleaning (dairy industry)**	S. Derby A00E084	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	3-2-0-2-0	1.4	-	2	a
2022	3407	Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)	Floor surface swabs before cleaning (dairy industry)	*C. sakazakii* Ad2342	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	0-5-4-0-4	2.6	-	2	a
2022	3408	Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)	Floor surface swabs before cleaning (dairy industry)	*C. sakazakii* Ad2342	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	0-5-4-0-4	2.6	-	2	a
2022	3409	Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)	Floor surface swabs before cleaning (dairy industry)	*C. sakazakii* Ad2342	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	0-5-4-0-4	2.6	-	2	a
2022	3410	Ecouvillons surface sol avant nettoyage (industrie de produits laitiers)	Floor surface swabs before cleaning (dairy industry)	*C. sakazakii* Ad2342	Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	0-5-4-0-4	2.6	-	2	a
2022	**3475**	**Chiffonnette avant nettoyage sceau crème glacée (production crème glacée)**	**Swipe before cleaning (ice cream production)**	*S.* Braenderup Ad2151 + *C. dublinensis* LMG23823T	Environmental sample (dairy industry) / Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	5-0-3-3-3/1-2-0-2-1	2.8/1.2	+	2	a
2022	**3476**	**Chiffonnette avant nettoyage sceau crème glacée (production crème glacée)**	**Swipe before cleaning (ice cream production)**	*S.* Senftenberg Ad2149 + *C. sakazakii* Ad2343	Environmental sample (dairy industry) / Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	1-3-2-2-3/2-0-2-1-1	2.2/1.2	+	2	a
2022	**3477**	**Chiffonnette après nettoyage homo ADV crème glacée (production crème glacée)**	**Swipe after cleaning (ice cream production)**	*S.* Braenderup Ad2151 + *C. dublinensis* LMG23823T	Environmental sample (dairy industry) / Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	5-0-3-3-3/1-2-0-2-1	2.8/1.2	+	2	a
2022	**3478**	**Chiffonnette avant nettoyage pompe crème glacée (production crème glacée)**	**Swipe before cleaning (Ice Cream Production)**	*S.* Senftenberg Ad2149 + *C. sakazakii* Ad2343	Environmental sample (dairy industry) / Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	1-3-2-2-3/2-0-2-1-1	2.2/1.2	+	2	a
2022	**3479**	**Chiffonnette après nettoyage ouverture tuyau machine (industrie de produits laitiers)**	**Swipe After Cleaning (Dairy Industry)**	*S.* Braenderup Ad2151 + *C. dublinensis* LMG23823T	Environmental sample (dairy industry) / Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	5-0-3-3-3/1-2-0-2-1	2.8/1.2	+	2	a
2022	**3480**	**Chiffonnette après nettoyage remplissage dessus container (industrie de produits laitiers)**	**Swipe After Cleaning (Dairy Industry)**	*S.* Senftenberg Ad2149 + *C. sakazakii* Ad2343	Environmental sample (dairy industry) / Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	1-3-2-2-3/2-0-2-1-1	2.2/1.2	+	2	a
2022	**3481**	**Chiffonnette après nettoyage sol ascenseur tour 3 (industrie de produits laitiers)**	**Swipe After Cleaning (Dairy Industry)**	*S.* Senftenberg Ad2149 + *C. sakazakii* Ad2343	Environmental sample (dairy industry) / Environmental sample (dairy industry)	Seeding protocol 48h at 3±2°C	/	1-3-2-2-3/2-0-2-1-1	2.2/1.2	+	2	a
2022	**3637**	**Ecouvillon paillasse inox, après nettoyage (industrie de produits laitiers)**	**Stainless steel bench swab. after cleaning (dairy industry)**	*S.* Heidelberg A00E005	Environmental sample (dairy product industry)	Seeding protocol 48h at 3±2°C	/	3-1-2-3-3	2.4	+	2	a
2022	**3638**	**Ecouvillon embout aspirateur RDC, avant nettoyage (industrie de produits laitiers)**	**Vacuum nozzle swab. before cleaning (dairy industry)**	S. Tennessee A00E006	Environmental sample (dairy product industry)	Seeding protocol 48h at 3±2°C	/	0-2-6-5-4	3.4	+	2	a
2022	3639	Ecouvillon raclette plastique 1er étage, avant nettoyage (industrie de produits laitiers)	Swab before cleaning (dairy industry)	*C. sakazakii* Ad2364	Environmental sample (dairy product industry)	Seeding protocol 48h at 3±2°C	/	2-1-2-2-1	1.6	-	2	a

Year of analysis	Sample N°	Product (french name)	Product	Artificial contamination						Global result *Salmonella* spp	Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample				
								Enumeration	Mean			
2022	3640	Ecouvillon main courante remplissage, après nettoyage (industrie de produits laitiers)	Swab after cleaning (dairy industry)	*C. sakazakii* Ad2364	Environmental sample (dairy product industry)	Seeding protocol 48h at 3±2°C	/	2-1-2-2-1	1.6	-	2	a
2022	**3641**	**Chiffonnette ouverture vibro, avant nettoyage (industrie de produits laitiers)**	**Swipe. before cleaning (dairy industry)**	*S.* Heidelberg A00E005	Environmental sample (dairy product industry)	Seeding protocol 48h at 3±2°C	/	3-1-2-3-3	2.4	+	2	a
2022	**3642**	**Chiffonnette SAS carrelage, avant nettoyage (industrie de produits laitiers)**	**Swipe. before cleaning (dairy industry)**	S. Tennessee A00E006	Environmental sample (dairy product industry)	Seeding protocol 48h at 3±2°C	/	0-2-6-5-4	3.4	+	2	a
2022	**3643**	**Chiffonnette crème glacée, avant nettoyage (production de crème glacée)**	**Swipe before cleaning (ice cream production)**	*S.* Heidelberg A00E005	Environmental sample (dairy product industry)	Seeding protocol 48h at 3±2°C	/	3-1-2-3-3	2.4	+	2	a
2022	3644	Chiffonnette pompe crème glacée, après nettoyage (production de crème glacée)	Swipe after cleaning (ice cream production)	*C. sakazakii* Ad2364	Environmental sample (dairy product industry)	Seeding protocol 48h at 3±2°C	/	2-1-2-2-1	1.6	-	2	a
2022	**3737**	**Poussières d'aspirateur P62 E1 E2 (industrie de produits laitiers)**	**Vacuum cleaner dust P62 E1 E2 (dairy industry)**	S. Montevideo 604	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.4	-	2	b
2022	**3738**	**Poussières d'aspirateur P43 A32 (industrie de produits laitiers)**	**Vacuum cleaner dust P43 A32 (dairy industry)**	S. Montevideo 604	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.4	+	2	b
2022	**3739**	**Poussières d'aspirateur A22 E241 (industrie de produits laitiers)**	**Vacuum cleaner dust A22 E241 (dairy industry)**	S. Anatum Ad1166	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	2.0	+	2	b
2022	3740	Poussières d'aspirateur A32 E553 A31 (industrie de produits laitiers)	Vacuum cleaner dust A32 E553 A31 (dairy industry)	*C. sakazakii* Ad2407	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.5	-	2	b
2022	3741	Poussières d'aspirateur P51 2889 A12 (industrie de produits laitiers)	Vacuum cleaner dust P51 2889 A12 (dairy industry)	*C. sakazakii* Ad2407	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	1.5	-	2	b
2022	3742	Poussières d'aspirateur P51 E2E2 (industrie de produits laitiers)	Vacuum cleaner dust P51 E2E2 (dairy industry)	*C. sakazakii* Ad2382	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.5	-	2	b
2022	3743	Poussières d'aspirateur P32 P41 (industrie de produits laitiers)	Vacuum cleaner dust P32 P41 (dairy industry)	*C. sakazakii* Ad2382	Dairy product	Seeding protocol with lyophilised strain 2 weeks at ambient temperature	/	/	0.5	-	2	b
2023	**550**	**Poussières d'aspirateur n°1 (industrie de produits laitiers non probiotiques)**	**Vacuum cleaner dust n°1 (non-probiotic dairy industry)**	S. Anatum A00E007	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	0.90	4-1-2-0-1	1.6	+	2	b
2023	**551**	**Poussières d'aspirateur n°2 (industrie de produits laitiers non probiotiques)**	**Vacuum cleaner dust n°2 (non-probiotic dairy industry)**	S. Anatum A00E007	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	0.90	4-1-2-0-1	1.6	-	2	b
2023	**552**	**Poussières d'aspirateur n°3 (industrie de produits laitiers non probiotiques)**	**Vacuum cleaner dust n°3 (non-probiotic dairy industry)**	S. Livingstone A00E058	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	0.60	2-1-2-1-1	1.4	+	2	b
2023	**553**	**Poussières d'aspirateur n°4 (industrie de produits laitiers non probiotiques)**	**Vacuum cleaner dust n°4 (non-probiotic dairy industry)**	S. Livingstone A00E058	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	0.60	2-1-2-1-1	1.4	+	2	b
2023	**554**	**Poussières d'aspirateur n°5 (industrie de produits laitiers non probiotiques)**	**Vacuum cleaner dust n°5 (non-probiotic dairy industry)**	S. Derby A00E084	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	1.10	0-0-2-2-3	1.4	+	2	b
2023	555	Poussières d'aspirateur n°6 (industrie de produits laitiers non probiotiques)	Vacuum cleaner dust n°6 (non-probiotic dairy industry)	*C. sakazakii* Ad2360	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	1.2	1-0-0-0-0	0.2	-	2	b

Year of analysis	Sample N°	Product (french name)	Product	Artificial contamination						Global result *Salmonella* spp	Category	Type
				Strain	Origin	Injury protocol	Injury measurement	Inoculation level/sample				
								Enumeration	Mean			
2023	556	Poussières d'aspirateur n°7 (industrie de produits laitiers non probiotiques)	Vacuum cleaner dust n°7 (non-probiotic dairy industry)	*C. sakazakii* Ad2360	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	1.2	1-0-0-0-0	0.2	-	2	b
2023	557	Poussières d'aspirateur n°8 (industrie de produits laitiers non probiotiques)	Vacuum cleaner dust n°8 (non-probiotic dairy industry)	*C. sakazakii* Ad2386	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	1.60	0-1-1-1-2	1.0	-	2	b
2023	558	Poussières d'aspirateur n°9 (industrie de produits laitiers non probiotiques)	Vacuum cleaner dust n°9 (non-probiotic dairy industry)	*C. sakazakii* Ad2386	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	1.60	0-1-1-1-2	1.0	-	2	b
2023	559	Poussières d'aspirateur n°10 (industrie de produits laitiers non probiotiques)	Vacuum cleaner dust n°10 (non-probiotic dairy industry)	*C. sakazakii* Ad2387	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	1.20	0-4-3-5-2	2.8	-	2	b
2023	**560**	**Poussières d'aspirateur n°11-12 (industrie de produits laitiers non probiotiques)**	**Vacuum cleaner dust n°11-12 (non-probiotic dairy industry)**	S. Anatum A00E007 + *C. sakazakii* Ad2360	Environmental sample (dairy industry)/ Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	0,9/1,2	4-1-2-0-1/1-0-0-0-0	1.6/0.2	+	2	b
2023	**561**	**Poussières d'aspirateur n°13-14 (industrie de produits laitiers non probiotiques)**	**Vacuum cleaner dust n°13-14 (non-probiotic dairy industry)**	S. Livingstone A00E058 + *C. sakazakii* Ad2386	Environmental sample (dairy industry)/ Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	0,60/1,60	2-1-2-1-1/0-1-1-1-2	1.4/1.0	+	2	b
2023	**562**	**Poussières d'aspirateur n°15-16 (industrie de produits laitiers non probiotiques)**	**Vacuum cleaner dust n°15-16 (non-probiotic dairy industry)**	S. Derby A00E084 + *C. sakazakii* Ad2387	Environmental sample (dairy industry)/ Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	1,10/1,20	0-0-2-2-3/0-4-3-5-2	1.4/2.8	+	2	b
2023	**1363**	**Poussières d'aspirateur 24 (industrie de produits laitiers)**	**Vacuum cleaner dust 24 (dairy industry)**	*S.* Brandenburg Ad2151 + C. sakazakii Ad2408	Environmental sample (dairy industry)	Spiking protocol, heat treatment 56°C 8 min	1,50/2,5	2-2-1-0-1/2-0-3-1-3	1.2/1.8	-	2	b
2023	**1364**	**Poussières d'aspirateur 22 (industrie de produits laitiers)**	**Vacuum cleaner dust 22 (dairy industry)**	*S.* Brandenburg Ad2151 + C. sakazakii Ad2408	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1,50/2,5	2-2-1-0-1/2-0-3-1-3	1.2/1.8	+	2	b
2023	**1365**	**Poussières d'aspirateur A32 (industrie de produits laitiers)**	**A32 Vacuum Cleaner Dust (Dairy Industry)**	*S.* Brandenburg Ad2151 + C. sakazakii Ad2408	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1,50/2,5	2-2-1-0-1/2-0-3-1-3	1.2/1.8	+	2	b
2023	**1366**	**Poussières d'aspirateur 29 (industrie de produits laitiers)**	**Vacuum cleaner dust 29 (dairy industry)**	*S.* Manhattan 900 + *C. sakazakii* Ad2401	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1,20/1,30	2-1-3-1-1/4-2-4-2-1	1.6/2.6	+	2	b
2023	**1367**	**Poussières d'aspirateur 12 (industrie de produits laitiers)**	**Vacuum cleaner dust 12 (dairy industry)**	*S.* Manhattan 900 + *C. sakazakii* Ad2401	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1,20/1,30	2-1-3-1-1/4-2-4-2-1	1.6/2.6	+	2	b
2023	**1368**	**Poussières d'aspirateur 20 (industrie de produits laitiers)**	**Vacuum cleaner dust 20 (dairy industry)**	*S.* Heidelberg A00E005	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1.50	2-3-1-2-3	2.2	-	2	b
2023	**1369**	**Poussières d'aspirateur 26+P41 (industrie de produits laitiers)**	**Vacuum cleaner dust 26+P41 (dairy industry)**	*S.* Heidelberg A00E005	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1.50	2-3-1-2-3	2.2	+	2	b
2023	**1370**	**Poussières d'aspirateur P102+16 (industrie de produits laitiers)**	**Vacuum cleaner dust P102+16 (dairy industry)**	*C. sakazakii* Ad2391	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1.80	0-3-1-1-4	1.8	-	2	b
2023	**1371**	**Poussières d'aspirateur 27 (industrie de produits laitiers)**	**Vacuum cleaner dust 27 (dairy industry)**	*C. sakazakii* Ad2391	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1.80	0-3-1-1-4	1.8	-	2	b
2023	**1788**	**Poussières d'aspirateur de poudre de lait (industrie de produits laitiers)**	**Milk Powder Vacuum Cleaner Dusts (Dairy Industry)**	*S.* Manhattan 900	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	0.90	2-1-1-1-0	1.0	-	2	b
2023	**1789**	**Poussières d'aspirateur de poudre de lait (industrie de produits laitiers)**	**Milk Powder Vacuum Cleaner Dusts (Dairy Industry)**	*S.* Infantis A00E057	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1.05	1-1-1-0-0	0.6	-	2	b
2023	**1898**	**Poussières d'aspirateur de poudre de lait (industrie de produits laitiers)**	**Milk Powder Vacuum Cleaner Dusts (Dairy Industry)**	*S.* Manhattan 900	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1.10	4-1-0-2-1	1.4	-	2	b
2023	**1899**	**Poussières d'aspirateur de poudre de lait (industrie de produits laitiers)**	**Milk Powder Vacuum Cleaner Dusts (Dairy Industry)**	S. Infantis A00E057	Environmental sample (dairy product industry)	Spiking protocol, heat treatment 56°C 8 min	1.50	2-1-1-2-0	1.2	+	2	b

Appendix 4 – Sensitivity study: raw data

ne: new extraction
no amp: no amplification curves. To be considered as negative results
uncertain: interpretation given by the LC 480 II software. To be considered as negative results

Legend for column "Sample N°"

Foodproof StarPrep Three Kitr
Foodproof StarPrep Three 8-Strip Kit

Legend for column "Product"

BPW
BPW + vancomycin + Tween 80 (Alt) or prewarmed BPW 2T + Tween 80 (ref)
BPW (37°C) + Tween 80 (10g/L)
BPW (37°C) + α-amylase (1%)

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS																																								
Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease- Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																														Category	Type
			RVS		MKTTn		Result	PCR result										Confirmation						Final result *Salmonella* spp.				Agreement											
								foodproof® extraction						BAX lysis				RVS		MKTTn				foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis									
								BAX Q7			LC480 II			BAX Q7			LC480 II																							
			XLD	ASAP	XLD	ASAP		Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II						
2022	**3561**	**Infant milk powder, 6-12 months, with probiotics (*B. infantis* 2.5 x 10^6 CFU/g) (26% fat)**	+p	+p	+p	+p	+	23.4	38.4	+	18.02	34.65	+	19.7	37.9	+	16.74	0	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2022	**3562**	**Infant milk powder, 6-12 months, with probiotics (*B. infantis* 3.2 x 10^7 CFU/g) (23% fat)**	+p	+p	+p	+p	+	0.0	37.6	-	0.0	32.99	-	0.0	38.6	-	0	33.02	-	st	st	st	st	/	-	-	-	-	-	**ND**	**ND**	**ND**	**ND**	1	a
2022	**3563**	**Infant milk powder, 6-12 months, with probiotics (*B. lactis* 1.8 x 10^6 CFU/g) (26% fat**	+p	+p	+p	+p	+	29.7	38.9	+	26.21	0.0	+	31.4	38.1	+	31.5	32.15	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2022	**3564**	**Infant milk powder, from 6 months, with probiotics (*B. lactis* 3.5 x 10^7 CFU/g) (26% fat)**	st	st	st	st	-	19.9	37.9	+	16.51	33.20	+	20.2	37.3	+	17.24	37.04	+	+p	+p	+p	+p	+	+	+	+	+	+	**PD**	**PD**	**PD**	**PD**	1	a
2022	**3565**	**Infant milk powder, babies, with probiotics (*B. lactis* 3.5 x 10^7 CFU/g) (23.6% fat)**	+p	+p	+p	+p	+	0.0	37.7	-	0.0	33.53	-	0.0	38.4	-	38.28/ 0.0/ 0.0	33.13/ 32.77/ 32.87	+/- /-	st	st	st	st	/	-	-	-	-	-	**ND**	**ND**	**ND**	**$PA_{FP(alt)}$**	1	a
2022	3566	Infant milk powder, 6-12 months, follow-on milk, with probiotics (*B. infantis* 2.5 x 10^6 CFU/g) (26% fat)	st	st	st	st	-	0.0	0.0	-	0.0	0.0	-	41.3/ 0.0/ 0.0	0.0 /0.0/ 0.0	+/ -/-	0	0	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**$PD_{FP(alt)}$**	**NA**	1	a
2022	3567	Infant milk powder, 6-12 months, with probiotics (*B. infantis* 3.2 x 10^7 CFU/g) (23% fat)	st	st	st	st	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a

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

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS																																					
Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																												Category	Type
								Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																															
								PCR result																Confirmation						Final result *Salmonella* spp.				Agreement					
								foodproof® extraction						BAX lysis																foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II							RVS		MKTTn											
			RVS		MKTTn		Result																					ISO 6579-1	All confirmation tests										
			XLD	ASAP	XLD	ASAP		Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP			BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2022	3568	Infant milk powder, 6-12 months, with probiotics (*B. lactis* 1.8 x 10^6 CFU/g) (26% fat)	-	-	-	-	-	0.0	37.3	-	0.0	33.43	-	0.0	37.9	-	0.0	32.89	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2022	3569	Infant milk powder, from 6 months, with probiotics (*B. lactis* 3.5 x 10^7 CFU/g) (26% fat)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2022	3570	Infant milk powder, babies, with probiotics (*B. lactis* 3.5 x 10^7 CFU/g) (23.6% fat)	-	-	-	-	-	0.0/ 0.0/ 0.0*	0.0/ 0.0/ 0.0*	i/-*	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2022	**3797**	**Infant milk powder, 3rd age, with probiotics (*B. lactis* + *S. thermophilus* 1.5 x 10^6 CFU/g) (30% fat)**	+M	+p	+M	+p	+	20.8	0.0	+	17.84	0.0	+	23.6	0.0	+	21.01	0	+	+M	+p	+M	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2022	**3798**	**Infant milk powder, 3rd age, with probiotics (*B. lactis* + *S. thermophilus* 1.5 x 10^6 CFU/g) (30% fat)**	+md	+1/2	+1/2	+M	+	32.3	0.0	+	32.28	0.0	+	34.3	0.0	+	33.20	0	+	+M	+1/2	+M	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2022	**3799**	**Infant milk powder, 2nd age, with probiotics (*B. lactis* + *S. thermophilus* 3.1 x 10^7 CFU/g) (23% fat)**	+M	+M	+M	+M	+	22.5	0.0	+	19.71	0.0	+	24.9	0.0	+	22.11	0	+	+M	+p	+M	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2022	**3800**	**Infant milk powder, 2nd age, with probiotics (*B. lactis* + *S. thermophilus* 3.1 x 10^7 CFU/g) (23% fat)**	+1/2	+1/2	+M	+M	+	19.0	0.0	+	16.23	0.0	+	19.4	0.0	+	16.92	0	+	+M	+M	+M	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS

Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																				Category	Type
								Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																					
								PCR result										Confirmation						Final result *Salmonella* spp.				Agreement					
								foodproof® extraction					BAX lysis											foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II															
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
			RVS		MKTTn													RVS		MKTTn													
2022	**3801**	**Infant milk powder, 1st age, with probiotics (*B. lactis* 8.6 x 10^5 CFU/g) (26% fat)**	-	-	-	-	-	17.5	0.0	+	15.32	0.0	+	20.1	0.0	+	17.67	0	+	+M	+p	+M	+p	+	+	+	+	+	+	**PD**	**PD**	**PD**	**PD**	1	a
2023	**762**	**Infant milk powder with probiotics, 3rd age (*L. reuteri* DSM 17938 8.55 x 10^4 CFU/g) (26% fat)**	+p	+p	+p	+p	+	22.3	38.3	+	19.99	45	+	25.6	38.3	+	22.81	32.67	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2023	763	Infant milk powder with probiotics, 3rd age (*L. reuteri* DSM 17938 8.55 x 10^4 CFU/g) (26% fat)	-	-	st	st	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	**764**	**Infant milk powder with probiotics, after 10 months (*L. reuteri* DSM 17938 1.55.10^5 CFU/g) (23% fat)**	st	st	st	st	-	29.1	36.4	+	26.23	30.2	+	28.8	37.7	+	27.02	31.1	+	+p	+p	+p	+p	+	+	+	+	+	+	**PD**	**PD**	**PD**	**PD**	1	a
2023	765	Infant milk powder with probiotics, from 10 months (*L. reuteri* DSM 17938 1.55 x 10^5 CFU/g) (23% fat)	-	-	-	-	-	0.0	36.1	-	0.0	32.42	-	0.0	37.6	-	0	32.82	-	-	-	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	**766**	**Infant milk powder with probiotics, 3rd age (*L. reuteri* DSM 17938 8.24 x 10^4 CFU/g) (23.4% fat)**	+p	+p	+p	+p	+	33.5	37.3	+	30.93	31.82	+	38.4	38.0	+	34.38	32.73	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2023	767	Infant milk powder with probiotics, 3rd age from 1 year (*L. reuteri* DSM 17938 8.24 x 10^4 CFU/g) (23.4% fat)	-	-	st	st	-	0.0	37.1	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS																																						
Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																													Category	Type
								Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																																
								PCR result																Confirmation						Final result *Salmonella* spp.				Agreement					
			RVS		MKTTn			foodproof® extraction						BAX lysis										RVS		MKTTn				foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II																						
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II				
2023	**768**	**Infant milk powder with probiotics, organic from 6 months (*L. reuteri* DSM 17938 2.45 x 10^6 CFU/g) (26% fat)**	st	st	st	st	-	0.0	0.0	-	0.0	33.05	-	0.0	37.7	-	0	33.08	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	769	Infant milk powder with probiotics, organic from 6 months (*L. reuteri* DSM 17938 2.45 x 10^6 CFU/g) (26% fat)	-	-	st	st	-	0.0	0.0	-	0.0	31.55	-	0.0	35.3	-	0	33.19	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	**770**	**Infant milk powder with probiotics, 1st age for infant 0-6 months (*L. fermentum hereditum* 5.09 x 10^6 CFU/g) (24% fat)**	+p	+p	+p	+p	+	37.9	37.7	+	36.33	32.86	+	38.3	38.4	+	36.22	32.85	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2023	771	Infant milk powder with probiotics, 1st age for infant 0-6 months (*L. fermentum hereditum* 5.09 x 10^6 CFU/g) (24% fat)	-	-	st	st	-	0.0	36.2	-	0.0	30.12	-	0.0	37.7	-	0	32.41	-	-	-	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	**772**	**Infant milk powder with probiotics, formula thickened from 6 months (*L. fermentum hereditum* 3.09 x 10^6 CFU/g) (26% fat)**	+M	+M	+p	+p	+	34.9	36.8	+	32.17	32.62	+	32.8	38.3	+	31.09	32.23	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2022	**2903**	**Infant formula, 0-6 months (23,5% fat)**	+p	+p	+p	+p	+	24.6	37.2	+	21.89	33.11	+	25.1	38.3	+	21.28	35.35	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	b
2022	**2904**	**Infant formula, 6-12 months (22,6% fat)**	+p	+p	+p	+p	+	21.9	37.6	+	18.87	33.08	+	22.8	37.4	+	18.49	41.36	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	b

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS

Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease- Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																				Category	Type
			RVS		MKTTn			PCR result										Confirmation						Final result *Salmonella* spp.				Agreement					
								foodproof® extraction						BAX lysis				RVS		MKTTn				foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II																
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2022	**2905**	**Organic infant formula, 6-12 months (23,1% fat)**	+p	+p	+p	+p	+	19.1	37.3	+	16.02	33.17	+	22.1	37.2	+	18.63	39.27	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**2906**	**Infant formula, stage 2, 6-12 months (26,0% fat)**	+p	+p	+p	+p	+	24.3	37.8	+	21.57	33.02	+	25.2	37.6	+	21.18	34.5	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**2907**	**Infant formula, stage 2,from 6 months (22,0% fat)**	+p	+p	+p	+p	+	22.1	39.0	+	15.89	0	+	24.3	37.4	+	21.84	32.8	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**2908**	**Infant formula, stage 2, 6-12 months (22,0% fat)**	st	st	st	st	-	0.0	38.0	-	0	32.91	-	0	37.6	-	0	32.68	-	st	st	st	st	/	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	**2909**	**Infant formula, stage 2, 6months-1year (23,6% fat)**	+p	+p	+p	+p	+	21.0	37.3	+	16.56	33.12	+	21.8	37.9	+	19.28	39.02	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**2910**	**Infant formula, stage 2, 6-12 months (21,1% fat**	+p	+p	+p	+p	+	21.4	37.4	+	19.13	33.6	+	21.7	37.7	+	19.24	35.9	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	2963	Infant formula, stage 1, 6-12 months (22,0% fat)	-	-	-	-	-	0.0	0.0	-	0.0	0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2964	Organic infant formula, 0-6 months (24,0% fat)	-	-	-	-	-	0.0	0.0	-	0.0	24.21 (no amp)	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2965	Organic infant formula, 0-6 months (24,0% fat)	-	-	-	-	-	0.0	0.0	-	0.0	0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2966	Infant formula, 0-6 months (22,0% fat)	-	-	-	-	-	0.0	0.0	-	0.0	21.5 (no amp)	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2967	Infant formula, 0-6 months (21,0% fat)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2968	Infant formula, stage 2, 6-12 months (26,0% fat)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2969	Organic infant formula, from 6 months (25,0%fat)	-	-	-	-	-	0.0	0.0	-	0.0	27.34 (no amp)	-	0.0	0.0	-	0	25.85 (no amp)	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2970	Organic infant formula, 6-12 months (22,0%fat)	-	-	st	st	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	1	b

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS																																						
Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																												Category	Type
								Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																															
								PCR result																Confirmation						Final result *Salmonella* spp.				Agreement					
								foodproof® extraction						BAX lysis																foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II																						
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II				
			RVS		MKTTn															RVS		MKTTn																
2022	3023	Infant formula anti regurgitation, 0-6 months (25,0% fat)	+M	+p	+p	+p	+	18.8	0.0	+	15.26	28.71	+	19.8	35.0	+	17.5	43.02	+	+M	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	3024	Organic infant formula, stage 2, 6-12 months (25,0%fat)	+M	+p	+p	+p	+	20.1	0.0	+	16.95	28.66	+	19.7	0.0	+	18.97	28.88	+	+M	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	3025	Infant milk powder, gourmet babies, 6-12 months (26%fat)	+M	+p	+p	+p	+	20.5	0.0	+	18.1	0.0	+	19.7	0.0	+	16.8	0	+	+M	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	3026	Infant milk powder, 6-12 months (25.5% fat)	+M	+p	+M	+p	+	20.5	0.0	+	18.27	27.74 (no amp)	+	19.9	0.0	+	17.98	0	+	+M	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	3027	Organic infant milk powder, 2nd age (25%fat)	+M	+p	+M	+p	+	24.0	0.0	+	21.56	24.45 (no amp)	+	23.9	0.0	+	22.46	27.21	+	+M	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	3028	Premium infant milk powder, 0-6 months (24.7% fat)	+M	+p	+M	+p	+	25.8	37.9	+	22.35	31.96	+	21.7	37.0	+	19.9	31.46	+	+M	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	3083	Rice starch	+p	+p	+p	+p	+	22.8	36.8	+	20.55	33.3	+	20.9	37.2	+	18.59	35.68	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	3084	Corn starch	+p	+p	+p	+p	+	29.0	37.0	+	26.17	33.03	+	27.7	38.8	+	25.12	32.4	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	3085	Maltodextrin	+p	+p	+p	+p	+	24.0	37.2	+	20.93	33.01	+	21.7	37.0	+	19.18	36.2	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	3086	Whey	+p	+p	+p	+p	+	26.1	37.6	+	21.47	32.82	+	24.1	37.4	+	22.12	32.81	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	3087	Whey	+p	+p	+p	+p	+	29.6	37.0	+	25.64	32.69	+	30.0	38.3	+	26.49	32.12	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	3088	Maltodextrin	+p	+p	+p	+p	+	20.9	37.3	+	18.07	32.95	+	20.5	37.1	+	18.45	38.66	+	+p	+p	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	1	c

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS																																						
Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																													Category	Type
								Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																																
								PCR result																Confirmation						Final result *Salmonella* spp.				Agreement					
								foodproof® extraction						BAX lysis																foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II																						
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II						
2022	3089	Rice starch	-	+pd (Crono-bacter spp.)	-	+pd (Crono-bacter spp.)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	+pd (Crono bacter spp.)	-	+pd (Crono-bacter spp.)	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c
2022	3090	Corn starch	-	+pd (Crono-bacter spp.)	-	+pd (Crono-bacter spp.)	-	0.0	34.7	-	0.0	31.62	-	0.0	37.0	-	0	32.36	-	-	+pd (Crono bacter spp.)	-	+pd (Crono-bacter spp.)	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c
2022	3091	Maltodextrin	-	-	st	st	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	28.97 (no amp)	0	-	-	-	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c
2022	3092	Whey	-	-	st	st	-	0.0	36.6	-	0.0	32.52	-	0.0	37.4	-	19.03 (no amp)	32.49	-	-	-	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c
2022	3093	Whey	-	-	st	st	-	0.0	36.3	-	0.0	32.33	-	0.0	37.2	-	0.0	32.22	-	-	-	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c
2022	3094	Maltodextrin	-	+pd (Crono-bacter spp.)	-	+Md (Crono-bacter spp.)	-	0.0	0.0	-	0.0	19.00 (no amp)	-	0.0	0.0	-	28.66 (no amp)	0	-	-	+pd (Crono bacter spp.)	-	+Md (Crono-bacter spp.)	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c
2022	**3175**	**Lactose**	+1/2	+M	+1/2	+M	+	22.4	0.0	+	19.98	0.0	+	25.3	0.0	+	20.95	21.09 (no amp)	+	+1/2	+M	+1/2	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	c
2022	**3176**	**Lactose**	+1/2	+M	+M	+M	+	19.9	0.0	+	17.74	0.0	+	21.6	0.0	+	19.68	18.66	+	+1/2	+M	+M	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	c
2022	**3177**	**Whey**	+1/2	+M	+M	+M	+	21.8	0.0	+	19.44	0.0	+	22.7	0.0	+	20.91	19.55	+	+1/2	+M	+M	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	c
2022	**3178**	**Wheat starch**	+1/2	+M	+1/2	+M	+	21.9	0.0	+	19.54	0.0	+	20.3	0.0	+	18.89	0	+	+1/2	+M	+1/2	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	c
2022	**3179**	**Maltodextrin**	+1/2	+M	+M	+M	+	22.2	0.0	+	20.12	0.0	+	19.9	0.0	+	17.81	0	+	+1/2	+M	+M	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	c
2022	**3180**	**Whey Protein Concentrate**	+1/2	+M	+M	+M	+	20.3	0.0	+	18.79	0.0	+	22.2	0.0	+	20.64	0	+	+1/2	+M	+M	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	c

PRODUCTION ENVIRONMENTAL SAMPLES																																								
Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																														Category	Type
								Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																															
								PCR result														Confirmation						Final result *Salmonella* spp.				Agreement					
			RVS		MKTTn			foodproof® extraction						BAX lysis						RVS		MKTTn				foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II																			
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2022	**3396**	**Floor surface swabs before cleaning (dairy industry)**	st	st	st	st	-	0.0	37.0	-	0.0	33.33	-	0.0	38.2	-	0	33.10	-	st	st	st	st	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	**3397**	**Floor surface swabs before cleaning (dairy industry)**	+p	+p	+p	+p	+	21.1	37.8	+	18.44	33.1	+	22.0	37.4	+	20.08	34.36	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	**3398**	**Floor surface swabs before cleaning (dairy industry)**	+p	+p	+p	+p	+	24.3	37.7	+	22.08	32.91	+	29.9	38.1	+	26.69	31.92	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	3399	Floor surface swabs before cleaning (dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	3400	Floor surface swabs before cleaning (dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	3401	Floor surface swabs before cleaning (dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	3402	Floor surface swabs before cleaning (dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	**3403**	**Floor surface swabs before cleaning (dairy industry)**	+p	+p	+p	+p	+	21.0	38.3	+	18.85	33.36	+	20.5	37.4	+	19.08	37.23	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	**3404**	**Floor surface swabs before cleaning (dairy industry)**	st	st	st	st	-	0.0	36.6	-	0.0	33.1	-	0.0	38.5	-	0	33.20	-	st	st	st	st	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	**3405**	**Floor surface swabs before cleaning (dairy industry)**	st	st	st	st	-	0.0	37.1	-	0.0	33.29	-	0.0	38.3	-	0	32.79	-	st	st	st	st	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	**3406**	**Floor surface swabs before cleaning (dairy industry)**	st	st	st	st	-	0.0	36.0	-	0.0	33.37	-	0.0	38.1	-	0	32.95	-	st	st	st	st	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	3407	Floor surface swabs before cleaning (dairy industry)	-	-	-	-	-	0.0 / 0.0/ 0.0*	0.0 / 0.0/ 0.0*	**i/-***	0.0	22.50 (no amp)	-	0.0	0.0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a

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

PRODUCTION ENVIRONMENTAL SAMPLES																																					
Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																													Category	Type
								Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																																
								PCR result																Confirmation						Final result *Salmonella* spp.				Agreement					
			RVS		MKTTn			foodproof® extraction						BAX lysis										RVS		MKTTn				foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II																					
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II				
2022	3408	Floor surface swabs before cleaning (dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	3409	Floor surface swabs before cleaning (dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	3410	Floor surface swabs before cleaning (dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	15.19 (no amp)	-	0.0	0.0	-	0	0	-	-	-	-	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	**3475**	**Swipe before cleaning (ice cream production)**	+p	+p	+p	+p	+	24.4	37.5	+	21.94	39.83	+	31.1	38.1	+	27.36	31.99	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	**3476**	**Swipe before cleaning (ice cream production)**	+1/2	+1/2	+1/2	+M	+	20.8	0.0	+	18.37	0.0	+	22.4	0.0	+	19.67	0	+	+1/2	+1/2	+1/2	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	**3477**	**Swipe after cleaning (ice cream production)**	+1/2	+1/2	+1/2	+M	+	20.3	0.0	+	17.79	0.0	+	21.1	0.0	+	18.36	0	+	+1/2	+1/2	+1/2	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	**3478**	**Swipe before cleaning (Ice Cream Production)**	+p	+p	+M	+p	+	20.8	37.5	+	18.44	40.75	+	22.1	37.3	+	19.79	33.53	+	+p	+p	+M	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	3744	Vacuum cleaner dust E241 CE1 (dairy industry)	-	-	-	-	-	0.0	36.8	-	0.0	33.17	-	0.0	37.9	-	0	32.68	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2022	3745	Vacuum cleaner dust P62 (dairy industry)	-	-	-	-	-	0.0	37.5	-	0.0	33.5	-	0.0	38.7	-	0	32.66	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2022	3746	Vacuum cleaner dust P32 (dairy industry)	st	st	st	st	-	0.0	36.2	-	0.0	32.97	-	0.0	38.6	-	0	32.23	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2022	**3479**	**Swipe After Cleaning (Dairy Industry)**	+p	+p	+p	+p	+	21.8	37.4	+	19.11	45	+	26.1	37.4	+	21.49	40.15	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	**3480**	**Swipe After Cleaning (Dairy Industry)**	+1/2	+1/2	+1/2	+M	+	20.9	0.0	+	18.96	0.0	+	22.2	0.0	+	20.00	0	+	+1/2	+1/2	+1/2	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	**3481**	**Swipe After Cleaning (Dairy Industry)**	+1/2	+1/2	+1/2	+M	+	20.7	0.0	+	18.70	19.46 (no amp)	+	25.4	0.0	+	21.60	0	+	+1/2	+1/2	+1/2	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	**3637**	**Stainless steel bench swab, after cleaning (dairy industry)**	+p	+p	+p	+p	+	20.1	37.2	+	17.51	32.92	+	20.3	37.3	+	17.55	41.67	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a

PRODUCTION ENVIRONMENTAL SAMPLES																																					
Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																														Category	Type
								Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																															
								PCR result																Confirmation						Final result *Salmonella* spp.				Agreement					
			RVS		MKTTn			foodproof® extraction						BAX lysis										RVS		MKTTn				foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II																						
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II				
2022	**3638**	**Vacuum nozzle swab, before cleaning (dairy industry)**	+p	+p	+p	+p	+	20.1	36.5	+	17.7	33.01	+	20.6	37.2	+	17.89	37.07	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	3639	Swab before cleaning (dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	40.17/ 0.0/ 0.0	00.0/ 0.0 /0.0	+/- /-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**PD$_{FP(alt)}$**	2	a
2022	3640	Swab after cleaning (dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	**3641**	**Swipe, before cleaning (dairy industry)**	+M	+p	+p	+1/2	+	29.8	35.9	+	26.76	31.84	+	29.8	36.3	+	26.73	32.1	+	+M	+p	+m	+1/2	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	**3642**	**Swipe, before cleaning (dairy industry)**	+M	+p	+M	+p	+	22.0	37.2	+	19.47	33.08	+	20.8	37.4	+	18.01	38.72	+	+M	+p	+M	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	**3643**	**Swipe before cleaning (ice cream production)**	+p	+p	+p	+p	+	25.1	37.1	+	22.15	32.97	+	25.8	37.5	+	22.57	33.67	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	a
2022	3644	Swipe after cleaning (ice cream production)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	a
2022	**3737**	**Vacuum cleaner dust P62 E1 E2 (dairy industry)**	-	-	-	-	-	0.0	37.7	-	0.0	32.64	-	0.0	37.7	-	0	32.81	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2022	**3738**	**Vacuum cleaner dust P43 A32 (dairy industry)**	+m	+m	+1/2	+m	+	40.9	36.7	+	33.65	32.33	+	39.1	37.6	+	37.48	32.36	+	+m	+m	+1/2	+m	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	563	Vacuum cleaner dust n°17-18 (non-probiotic dairy industry)	st	st	st	st	-	0.0	37.2	-	0.0	33.13	-	0.0	37.9	-	0	32.71	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	564	Vacuum cleaner dust n°19-20 (non-probiotic dairy industry)	st	st	st	st	-	0.0	37.4	-	0.0	32.93	-	0.0	37.4	-	0	32.95	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	565	Vacuum cleaner dust n°21-22 (non-probiotic dairy industry)	st	st	st	st	-	0.0	37.6	-	0.0	33.64	-	0.0	37.9	-	0	32.86	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	566	Vacuum cleaner dust n°23-24 (non-probiotic dairy industry)	st	st	st	st	-	0.0	37.8	-	0.0	33.28	-	0.0	38.2	-	0	32.94	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b

PRODUCTION ENVIRONMENTAL SAMPLES

Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																										Category	Type
								Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																											
								PCR result												Confirmation						Final result *Salmonella* spp.				Agreement					
			RVS		MKTTn			foodproof® extraction					BAX lysis						RVS		MKTTn				foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II																
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2023	567	Vacuum cleaner dust n°25-26 (non-probiotic dairy industry)	st	st	st	st	-	0.0	37.1	-	0.0	35.68	-	0.0	38.2	-	0	32.63	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2022	**3739**	**Vacuum cleaner dust A22 E241 (dairy industry)**	+M	+M	+p	+p	+	28.0	38.5	+	22.12	40.61	+	27.7	38.6	+	24.76	37.66	+	+M	+M	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2022	3740	Vacuum cleaner dust A32 E553 A31 (dairy industry)	-	-	-	-	-	0.0	37.0	-	0.0	32.79	-	0.0	37.3	-	0	32.36	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2022	3741	Vacuum cleaner dust P51 2889 A12 (dairy industry)	-	-d/-	-	-	-	0.0	36.7	-	0.0	32.77	-	0.0	37.9	-	0	32.69	-	-	-d/-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2022	3742	Vacuum cleaner dust P51 E2E2 (dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	29.48 (no amp)	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2022	3743	Vacuum cleaner dust P32 P41 (dairy industry)	-	-	-	-	-	0.0	36.3	-	0.0	32.66	-	0.0	36.6	-	0	32.25	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**550**	**Vacuum cleaner dust n°1 (non-probiotic dairy industry)**	+p	+p	+p	+p	+	18.6	37.4	+	16.36	42.17	+	21.6	37.1	+	19.07	35.68	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	**551**	**Vacuum cleaner dust n°2 (non-probiotic dairy industry)**	st	st	st	st	-	0.0	37.3	-	0.0	32.79	-	0.0	37.9	-	0	33.11	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**552**	**Vacuum cleaner dust n°3 (non-probiotic dairy industry)**	+p	+p	+p	+p	+	28.1	38.3	+	25.05	31.96	+	30.0	38.5	+	28.52	32.39	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	**553**	**Vacuum cleaner dust n°4 (non-probiotic dairy industry)**	+p	+p	+p	+p	+	21.5	38.1	+	18.59	0.0	+	21.1	36.9	+	20.72	33.17	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	**554**	**Vacuum cleaner dust n°5 (non-probiotic dairy industry)**	+p	+p	+p	+p	+	22.4	37.7	+	19.85	45	+	25.1	38.0	+	24.02	32.41	+	+p	+p	+p	+p	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	555	Vacuum cleaner dust n°6 (non-probiotic dairy industry)	st	st	st	st	-	0.0	36.9	-	0.0	32.71	-	0.0	38.5	-	0	33.48	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b

PRODUCTION ENVIRONMENTAL SAMPLES

Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease- Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																Final result *Salmonella* spp.				Agreement				Category	Type
								PCR result										Confirmation																	
			RVS		MKTTn			foodproof® extraction						BAX lysis				RVS		MKTTn				foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II																	
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2023	556	Vacuum cleaner dust n°7 (non-probiotic dairy industry)	st	st	st	st	-	39.8/ 42.2/ 41.6	36.4/ 36.7/ 36.8	+/+/ +	0.0	30.71	-	0.0	37.6	-	0	32.94	-	st	st	st	st	/	-	-	-	-	-	PD$_{FP(alt)}$	NA	NA	NA	2	b
2023	557	Vacuum cleaner dust n°8 (non-probiotic dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0/ 0.0/ 0.0*	0.0/ 0.0/ 26.43*	i/-*	0.0	0.0	-	0	35,25 (uncertain)	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	2	b
2023	558	Vacuum cleaner dust n°9 (non-probiotic dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	22.93 (no amp)	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	2	b
2023	559	Vacuum cleaner dust n°10 (non-probiotic dairy industry)	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	26.23 (no amp)	-	-	-	-	-	/	-	-	-	-	-	NA	NA	NA	NA	2	b
2023	560	Vacuum cleaner dust n°11-12 (non-probiotic dairy industry)	+M	+M	+M	+p	+	22.9	0.0	+	21.29	0.0	+	25.3	0.0	+	23.06	0	+	+M	+M	+M	+p	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	561	Vacuum cleaner dust n°13-14 (non-probiotic dairy industry)	+12	+M	+M	+p	+	23.1	37.6	+	0.0/ 20.91/ 25.27*	0.0/ 0.0/ 40.68*	i/+/+*	22.9	36.8	+	21.69	32.2	+	+1/2	+M	+M	+p	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	562	Vacuum cleaner dust n°15-16 (non-probiotic dairy industry)	+M	+M	+M	+p	+	22.3	0.0	+	19.51	0.0	+	20.8	0.0	+	19.93	29.23	+	+M	+M	+M	+p	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	1363	Vacuum cleaner dust 24 (dairy industry)	-	-	st	st	-	0.0	37.0	-	0.0	33.11	-	0.0	38.0	-	0	33.02	-	-	-	st	st	/	-	-	-	-	-	NA	NA	NA	NA	2	b
2023	1364	Vacuum cleaner dust 22 (dairy industry)	+1/2	+M	+p	+p	+	27.1	37.6	+	24.67	31.22	+	25.4	37.7	+	23.01	35.65	+	+1/2	+M	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	1365	A32 Vacuum Cleaner Dust (Dairy Industry)	+m	+1/2	+1/2	+1/2	+	38.8	37.3	+	36.65	32.64	+	40.2	37.9	+	39.89	33.15	+	+m	+1/2	+1/2	+1/2	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	1366	Vacuum cleaner dust 29 (dairy industry)	+1/2	+M	+p	+p	+	28.9	34.5	+	26.27	29.56	+	26.4	35.4	+	24.61	29,44 (uncertain)	+	+1/2	+M	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	1367	Vacuum cleaner dust 12 (dairy industry)	+1/2	+M	+p	+p	+	35.0	33.6	+	32.32	29.76	+	33.6	0.0	+	31.39	0	+	+1/2	+M	+p	+p	+	+	+	+	+	+	PA	PA	PA	PA	2	b

PRODUCTION ENVIRONMENTAL SAMPLES																																										
Year of analysis	Sample N°	Product	Reference method: ISO 6579-1♦ 200 or 375g					Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																																Category	Type
								Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C																																	
								PCR result																Confirmation						Final result *Salmonella* spp.				Agreement					
			RVS		MKTTn			foodproof® extraction						BAX lysis										RVS		MKTTn				foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
								BAX Q7			LC480 II			BAX Q7			LC480 II																						
			XLD	ASAP	XLD	ASAP	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	XLD	ASAP	XLD	ASAP	ISO 6579-1	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II				
2023	**1368**	**Vacuum cleaner dust 20 (dairy industry)**	st	st	st	st	-	0.0	35.7	-	0.0	33.03	-	0.0	38.4	-	0	33.51	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**1369**	**Vacuum cleaner dust 26+P41 (dairy industry)**	+m	+1/2	+m	+1/2	+	37.3	37.2	+	34.63	33.01	+	38.8	38.3	+	38.37	33.55	+	+m	+1/2	+m	+1/2	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	**1370**	**Vacuum cleaner dust P102+16 (dairy industry)**	-	-	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0	0	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**1371**	**Vacuum cleaner dust 27 (dairy industry)**	-	-	-	-	-	0.0	36.0	-	0.0	32.01	-	0.0	37.0	-	0	32.65	-	-	-	-	-	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**1788**	**Milk Powder Vacuum Cleaner Dusts (Dairy Industry)**	st	st	st	st	-	0.0	37.0	-	0.0	31.92	-	0.0	38.2	-	0	32.87	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**1789**	**Milk Powder Vacuum Cleaner Dusts (Dairy Industry)**	st	st	st	st	-	0.0	36.1	-	0.0	32.36	-	0.0	37.3	-	0	32.62	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**1898**	**Milk Powder Vacuum Cleaner Dusts (Dairy Industry)**	st	st	st	st	-	0.0	36.8	-	0.0	32.81	-	0.0	38.3	-	0	32.93	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**1899**	**Milk Powder Vacuum Cleaner Dusts (Dairy Industry)**	+M	+M	+M	+M	+	28.7	0	+	24.87	29.87	+	29.5	39.00	+	25.61	32.93	+	+M	+M	+M	+M	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2022	3732	Milk Protein	st	st	st	st	-	0.0	36.3	-	0.0	32.97	-	0.0	38.5	-	0	33.31	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c
2022	3733	Lactose	st	st	st	st	-	0.0	36.6	-	0.0	32.92	-	0.0	38.4	-	0	32.85	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c
2022	3734	Maltodextrin	st	st	st	st	-	0.0	36.4	-	0.0	32.46	-	0.0	38.2	-	0	33.03	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c
2022	3735	Whey	st	st	st	st	-	0.0	36.5	-	0.0	33.08	-	0.0	38.5	-	0.0	32.67	-	st	st	st	st	/	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS																											
Year of analysis	Sample N°	Product	ISO 6579-1♦ (200 or 375g)	Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease- Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C + 72h at 3±2°C												Confirmation+ 72h at 3±2°C	Final result *Salmonella* spp. + 72h at 3±2°C				Agreement + 72h at 3±2°C				Category	Type
				PCR result+ 72h at 3±2°C																							
				foodproof® extraction						BAX lysis							foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
				BAX Q7			LC480 II			BAX Q7			LC480 II														
			Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2022	**3561**	**Infant milk powder, 6-12 months, with probiotics (*B. infantis* 2.5 x 10^6 CFU/g) (26% fat)**	+	25.1	38.3	+	17.97	32.92	+	20.6	37.8	+	17.9	36.7	+	+	+	+	+	+	PA	PA	PA	PA	1	a
2022	**3562**	**Infant milk powder, 6-12 months, with probiotics (*B. infantis* 3.2 x 10^7 CFU/g) (23%MG)**	+	0.0	37.1	-	0.0	33.22	-	0.0	38.0	-	0.0	32.65	-	-	-	-	-	-	ND	ND	ND	ND	1	a
2022	**3563**	**Infant milk powder, 6-12 months, with probiotics (*B. lactis* 1.8 x 10^6 CFU/g) (26%MG)**	+	21.8	38.4	+	0.0/ 29.33/ 20.66*	0.0/ 0.0/ 40.34*	i/+/+*	23.0	38.3	+	20.69	35.25	+	+	+	+	+	+	PA	PA	PA	PA	1	a
2022	**3564**	**Infant milk powder, from 6 months, with probiotics (*B. lactis* 3.5 x 10^7 CFU/g) (26% fat)**	-	23.4	37.5	+	16.53	33.14	+	20.8	37.5	+	18.39	37.71	+	+	+	+	+	+	PD	PD	PD	PD	1	a
2022	**3565**	**Infant milk powder, babies, with probiotics (*B. lactis* 3.5 x 10^7 CFU/g) (23.6% fat)**	+	0.0	37.3	-	0.0	33.54	-	0.0	37.8	-	0.0	32.83	-	-	-	-	-	-	ND	ND	ND	ND	1	a
2022	3566	Infant milk powder, 6-12 months, follow-on milk, with probiotics (*B. infantis* 2.5 x 10^6 CFU/g) (26% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	41.2/ 0.0/ 0.0	0.0/ 0.0/ 0.0	+/-/-	-	-	-	-	-	NA	NA	NA	$PD_{FP(alt)}$	1	a
2022	3567	Infant milk powder, 6-12 months, with probiotics (*B. infantis* 3.2 x 10^7 CFU/g) (23%MG)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	a
2022	3568	Infant milk powder, 6-12 months, with probiotics (*B. lactis* 1.8 x 10^6 CFU/g) (26%MG)	-	0.0	37.0	-	0.0	33.11	-	0.0	38.1	-	0.0	32.66	-	-	-	-	-	-	NA	NA	NA	NA	1	a
2022	3569	Infant milk powder, from 6 months, with probiotics (*B. lactis* 3.5 x 10^7 CFU/g) (26% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	a
2022	3570	Infant milk powder, babies, with probiotics (*B. lactis* 3.5 x 10^7 CFU/g) (23.6% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	a
2022	**3797**	**Infant milk powder, 3rd age, with probiotics (*B. lactis* + *S. thermophilus* 1.5 x 10^6 CFU/g) (30% fat)**	+	20.0	0.0	+	16.96	0.0	+	21.4	0.0	+	19.20	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	a
2022	**3798**	**Infant milk powder, 3rd age, with probiotics (*B. lactis* + *S. thermophilus* 1.5 x 10^6 CFU/g) (30% fat)**	+	28.2	0.0	+	28.32	0.0	+	29.6	0.0	+	28.54	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	a
2022	**3799**	**Infant milk powder, 2nd age, with probiotics (*B. lactis* + *S. thermophilus* 3.1 x 10^7 CFU/g) (23% fat)**	+	19.3	0.0	+	16.24	0.0	+	20.9	0.0	+	18.33	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	a

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

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS																																	
Year of analysis	Sample N°	Product	ISO 6579-1♦ (200 or 375g)	Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease- Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C + 72h at 3±2°C												Confirmation+ 72h at 3±2°C	Final result *Salmonella* spp. + 72h at 3±2°C				Agreement + 72h at 3±2°C				Category	Type
				PCR result+ 72h at 3±2°C																													
				foodproof® extraction						BAX lysis							foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis									
				BAX Q7			LC480 II			BAX Q7			LC480 II																				
			Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II									
2022	**3800**	**Infant milk powder, 2nd age, with probiotics (*B. lactis* + *S. thermophilus* 3.1 x 10^7 CFU/g) (23% fat)**	+	18.7	0.0	+	16.36	0.0	+	19.3	0.0	+	17.51	0.0	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2022	**3801**	**Infant milk powder, 1st age, with probiotics (*B. lactis* 8.6 x 10^5 CFU/g) (26% fat)**	-	17.8	0.0	+	14.90	0.0	+	20.2	0.0	+	19.17	0.0	+	+	+	+	+	+	**PD**	**PD**	**PD**	**PD**	1	a
2023	**762**	**Infant milk powder with probiotics, 3rd age (*L. reuteri* DSM 17938 8.55 x 10^4 CFU/g) (26% fat)**	+	21.1	38.1	+	18.13	0.0	+	23.0	38.4	+	19.75	39.82	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2023	763	Infant milk powder with probiotics, 3rd age (*L. reuteri* DSM 17938 8.55 x 10^4 CFU/g) (26% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	**764**	**Infant milk powder with probiotics, after 10 months (*L. reuteri* DSM 17938 1.55 x 10^5 CFU/g) (23% fat)**	-	28.5	37.8	+	25.62	30.66	+	30.9	38.3	+	26.32	31.47	+	+	+	+	+	+	**PD**	**PD**	**PD**	**PD**	1	a
2023	765	Infant milk powder with probiotics, from 10 months (*L. reuteri* DSM 17938 1.55 x 10^5 CFU/g) (23% fat)	-	0.0	35.0	-	0.0	31.04	-	0.0	36.5	-	0.0	34.06	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	**766**	**Infant milk powder with probiotics, 3rd age (*L. reuteri* DSM 17938 8.24 x 10^4 CFU/g) (23.4% fat)**	+	31.1	37.2	+	28.24	31.79	+	31.9	38.5	+	29.37	32.72	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2023	767	Infant milk powder with probiotics, 3rd age from 1 year (*L. reuteri* DSM 17938 8.24 x 10^4 CFU/g) (23.4% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	**768**	**Infant milk powder with probiotics, organic from 6 months (*L. reuteri* DSM 17938 2.45 x 10^6 CFU/g) (26% fat)**	-	0.0	37.1	-	0.0	33.26	-	0.0	38.5	-	0.0	33.20	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	769	Infant milk powder with probiotics, organic from 6 months (*L. reuteri* DSM 17938 2.45 x 10^6 CFU/g) (26% fat)	-	0.0	33.0	-	0.0	31.54	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	**770**	**Infant milk powder with probiotics, 1st age for infant 0-6 months (*L. fermentum hereditum* 5.09 x 10^6 CFU/g) (24% fat)**	+	36.3	37.5	+	34.52	32.51	+	35.9	38.7	+	34.31	32.98	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2023	771	Infant milk powder with probiotics, 1st age for infant 0-6 months (*L. fermentum hereditum* 5.09 x 10^6 CFU/g) (24% fat)	-	0.0	35.1	-	0.0	31.78	-	0.0	37.0	-	0.0	33.19	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	a
2023	**772**	**Infant milk powder with probiotics, formula thickened from 6 months (*L. fermentum hereditum* 3.09.^{106} CFU/g) (26% fat)**	+	34.2	37.9	+	32.29	32.54	+	32.8	38.1	+	31.27	32.8	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	a
2022	**2903**	**Infant formula, 0-6 months (23,5% fat)**	+	25.6	37.7	+	22.73	33.28	+	25.8	37.6	+	22.57	33.56	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	1	b

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS																										
Year of analysis	Sample N°	Product	ISO 6579-1♦ (200 or 375g)	Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease- Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C + 72h at 3±2°C											Confirmation+ 72h at 3±2°C	Final result *Salmonella* spp. + 72h at 3±2°C				Agreement + 72h at 3±2°C				Category	Type
				PCR result+ 72h at 3±2°C																						
				foodproof® extraction						BAX lysis																
				BAX Q7			LC480 II			BAX Q7			LC480 II													
			Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	All confirmation tests	foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
																	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2022	**2904**	**Infant formula, 6-12 months (22,6% fat)**	+	20.7	38.5	+	18.29	33.57	+	22.1	37.1	+	17.86	37.47	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**2905**	**Organic infant formula, 6-12 months (23,1% fat)**	+	20.3	37.5	+	16.67	40.69	+	21.6	37.3	+	17.20	42.25	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**2906**	**Infant formula, stage 2, 6-12 months (26,0% fat)**	+	22.7	37.6	+	19.30	33.00	+	25.6	38.2	+	21.12	40.03	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**2907**	**Infant formula, stage 2,from 6 months (22,0% fat)**	+	24.7	38.4	+	22.73	32.91	+	21.5	37.8	+	18.31	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**2909**	**Infant formula, stage 2, 6months-1year (23,6% fat)**	+	19.7	38.2	+	17.79	33.34	+	20.3	38.1	+	19.04	45.00	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**2910**	**Infant formula, stage 2, 6-12 months (21,1% fat)**	+	22.6	37.6	+	20.35	33.61	+	21.6	38.2	+	18.82	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	2963	Infant formula, stage 1, 6-12 months (22,0% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2964	Organic infant formula, 0-6 months (24,0% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2965	Organic infant formula, 0-6 months (24,0% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2966	Infant formula, 0-6 months (22,0% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2967	Infant formula, 0-6 months (21,0% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2968	Infant formula, stage 2, 6-12 months (26,0% fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2969	Organic infant formula, from 6 months (25,0%fat)	-	0.0	0.0	-	0.0	28.2 (no amp)	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	2970	Organic infant formula, 6-12 months (22,0%fat)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	b
2022	**3023**	**Infant formula anti regurgitation, 0-6 months (25,0% fat)**	+	18.4	0.0	+	16.47	23.12 (no amp)	+	20.2	0.0	+	18.48	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**3024**	**Organic infant formula, stage 2, 6-12 months (25,0%fat)**	+	17.8	0.0	+	16.01	0.0	+	19.8	0.0	+	18.87	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**3025**	**Infant milk powder, gourmet babies, 6-12 months (26%fat)**	+	19.3	0.0	+	18.10	0.0	+	20.4	0.0	+	18.57	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**3026**	**Infant milk powder, 6-12 months (25.5% fat)**	+	21.5	0.0	+	19.64	0.0	+	21.0	0.0	+	19.52	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**3027**	**Organic infant milk powder, 2nd age (25%fat)**	+	22.8	0.0	+	21.07	0.0	+	24.5	0.0	+	22.97	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**3028**	**Premium infant milk powder, 0-6 months (24.7% fat)**	+	26.4	38.2	+	22.52	32.31	+	22.1	0.0	+	20.24	29.28	+	+	+	+	+	+	PA	PA	PA	PA	1	b
2022	**3083**	**Rice starch**	+	21.6	37.4	+	18.46	32.80	+	20.5	37.2	+	18.12	38.45	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	**3084**	**Corn starch**	+	24.9	37.1	+	21.92	32.69	+	24.4	37.6	+	21.83	37.49	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	**3085**	**Maltodextrin**	+	22.8	37.6	+	19.77	32.85	+	24.9	37.7	+	23.02	31.88	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	**3086**	**Whey**	+	22.3	41.3	+	20.03	33.44	+	24.1	37.9	+	20.95	38.00	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	**3087**	**Whey**	+	24.7	0.0	+	21.24	32.94	+	25.6	38.2	+	23.06	34.12	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	**3088**	**Maltodextrin**	+	19.9	37.5	+	17.58	33.07	+	20.9	37.2	+	19.19	39.54	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	3089	Rice starch	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	c

INFANT FORMULA WITH OR WITHOUT PROBIOTICS AND RELATED INGREDIENTS																										
Year of analysis	Sample N°	Product	ISO 6579-1♦ (200 or 375g)	Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																				Category	Type
				Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C + 72h at 3±2°C																					
				PCR result+ 72h at 3±2°C												Confirmation+ 72h at 3±2°C	Final result *Salmonella* spp. + 72h at 3±2°C				Agreement + 72h at 3±2°C					
				foodproof® extraction						BAX lysis							foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
				BAX Q7			LC480 II			BAX Q7			LC480 II													
			Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	All confirmation tests	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2022	3090	Corn starch	-	0.0	34.7	-	0.0	31.85	-	0.0	36.1	-	0.0	33.39	-	-	-	-	-	-	NA	NA	NA	NA	1	c
2022	3091	Maltodextrin	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	15.73 (no amp)	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	c
2022	3092	Whey	-	0.0	33.6	-	0.0	31.09	-	0.0	36.3	-	0.0	33.18	-	-	-	-	-	-	NA	NA	NA	NA	1	c
2022	3093	Whey	-	0.0	34.4	-	0.0	31.20	-	0.0	36.3	-	0.0	32.97	-	-	-	-	-	-	NA	NA	NA	NA	1	c
2022	3094	Maltodextrin	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	1	c
2022	**3175**	**Lactose**	+	18.9	0.0	+	16.96	0.0	+	20.1	0.0	+	17.86	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	**3176**	**Lactose**	+	20.2	0.0	+	17.87	0.0	+	22.4	0.0	+	20.39	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	**3177**	**Whey**	+	21.1	0.0	+	18.54	0.0	+	22.8	0.0	+	20.84	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	**3178**	**Wheat starch**	+	19.6	0.0	+	17.80	0.0	+	20.1	0.0	+	18.54	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	**3179**	**Maltodextrin**	+	21.5	0.0	+	18.98	0.0	+	21.3	0.0	+	19.29	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	c
2022	**3180**	**Whey Protein Concentrate**	+	21.0	0.0	+	18.82	0.0	+	22.8	0.0	+	21.22	0.0	+	+	+	+	+	+	PA	PA	PA	PA	1	c

PRODUCTION ENVIRONMENTAL SAMPLES																											
Year of analysis	Sample N°	Product	ISO 6579-1♦ (200 or 375g)	Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease- Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C + 72h at 3±2°C											Confirmation+ 72h at 3±2°C	Final result *Salmonella* spp. + 72h at 3±2°C				Agreement + 72h at 3±2°C				Category	Type
				PCR result+ 72h at 3±2°C																							
				foodproof® extraction						BAX lysis																	
				BAX Q7			LC 480 II			BAX Q7			LC 480 II														
			Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	All confirmation tests	foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
																	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2022	**3397**	**Floor surface swabs before cleaning (dairy industry)**	+	21.2	37.4	+	18.61	33.09	+	22.3	37.6	+	19.58	35.87	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3398**	**Floor surface swabs before cleaning (dairy industry)**	+	25.6	37.6	+	23.03	33.17	+	26.5	40.6	+	22.02	33.85	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	3399	Floor surface swabs before cleaning (dairy industry)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	a
2022	3400	Floor surface swabs before cleaning (dairy industry)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	a
2022	3401	Floor surface swabs before cleaning (dairy industry)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	a
2022	3402	Floor surface swabs before cleaning (dairy industry)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	a
2022	**3403**	**Floor surface swabs before cleaning (dairy industry)**	+	20.8	37.8	+	18.73	32.85	+	21.1	37.7	+	18.76	37.05	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	3407	Floor surface swabs before cleaning (dairy industry)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	a
2022	3408	Floor surface swabs before cleaning (dairy industry)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	a
2022	3409	Floor surface swabs before cleaning (dairy industry)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	a
2022	3410	Floor surface swabs before cleaning (dairy industry)	-	0.0	0.0	-	0.0	15.25 (no amp)	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	a
2022	**3475**	**Swipe before cleaning (ice cream production)**	+	20.9	36.5	+	18.59	45	+	25.1	38.9	+	23.77	36.66	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3476**	**Swipe before cleaning (ice cream production)**	+	20.9	0.0	+	18.14	0.0	+	21.7	0.0	+	19.86	0.0	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3477**	**Swipe after cleaning (ice cream production)**	+	18.8	0.0	+	16.52	35.46 (no amp)	+	21.0	0.0	+	19.09	0.0	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3478**	**Swipe before cleaning (Ice Cream Production)**	+	21.7	36.9	+	18.51	0.0	+	22.1	37.6	+	20.58	33	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3479**	**Swipe After Cleaning (Dairy Industry)**	+	21.6	37.0	+	18.83	45	+	25.5	37.2	+	20.91	37.56	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3480**	**Swipe After Cleaning (Dairy Industry)**	+	21.9	0.0	+	18.89	0.0	+	22.1	0.0	+	20.52	0.0	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3481**	**Swipe After Cleaning (Dairy Industry)**	+	22.3	0.0	+	19.46	0.0	+	25.3	0.0	+	21.62	0.0	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3637**	**Stainless steel bench swab, after cleaning (dairy industry)**	+	26.9	0.0	+	18.68	33.32	+	22.3	37.9	+	19.48	35.98	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3638**	**Vacuum nozzle swab, before cleaning (dairy industry)**	+	0.0/ 21.3/ 24.2*	0.0/ 37.3/ 45.0*	i/+/+*	18.75	33.18	+	26.0	38.4	+	20.44	37.11	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	3639	Swab before cleaning (dairy industry)	-	0.0/ 0.0/ 0,0*	0.0/ 0.0/ 0.0*	i/-/-*	0.0	0.0	-	0.0	0.0	-	41.95/ 40.23/ 0.0	0.0/ 0.0/ 0.0	+/+/-	-	-	-	-	-	NA	NA	NA	$PD_{FP(alt)}$	2	a

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

PRODUCTION ENVIRONMENTAL SAMPLES																													
Year of analysis	Sample N°	Product	ISO 6579-1♦ (200 or 375g)	Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease- Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C + 72h at 3±2°C											Confirmation+ 72h at 3±2°C	Final result *Salmonella* spp. + 72h at 3±2°C				Agreement + 72h at 3±2°C				Category	Type
				PCR result+ 72h at 3±2°C																							
				foodproof® extraction						BAX lysis																	
				BAX Q7			LC 480 II			BAX Q7			LC 480 II														
			Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	All confirmation tests	foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
																	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2022	3640	Swab after cleaning (dairy industry)	-	0.0/ 0.0/ 0,0*	0.0/ 0.0/ 0.0*	i/-/-*	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	a
2022	**3641**	**Swipe, before cleaning (dairy industry)**	+	29.5	36.4	+	25.79	32.10	+	30.4	36.5	+	26.57	31.89	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3642**	**Swipe, before cleaning (dairy industry)**	+	22.5	36.7	+	20.31	32.86	+	20.9	37.2	+	19.00	38	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	**3643**	**Swipe before cleaning (ice cream production)**	+	24.1	36.8	+	21.32	33.03	+	24.5	37.8	+	22.64	33.14	+	+	+	+	+	+	PA	PA	PA	PA	2	a
2022	3644	Swipe after cleaning (ice cream production)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	a
2022	**3738**	**Vacuum cleaner dust P43 A32 (dairy industry)**	+	38.9	37.8	+	31.29	32.13	+	37.91	37.	+	34.12	31.87	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	566	Vacuum cleaner dust n°23-24 (non-probiotic dairy industry)	-	0.0	37.4	-	0.0	33.34	-	0.0	38.2	-	0.0	32.87	-	-	-	-	-	-	NA	NA	NA	NA	2	b
2022	**3739**	**Vacuum cleaner dust A22 E241 (dairy industry)**	+	27.2	38.9	+	22.83	38.40	+	26.8	38.8	+	23.72	35.84	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2022	3740	Vacuum cleaner dust A32 E553 A31 (dairy industry)	-	0.0	36.7	-	0.0	32.28	-	0.0	37.7	-	0.0	33.19	-	-	-	-	-	-	NA	NA	NA	NA	2	b
2022	3741	Vacuum cleaner dust P51 2889 A12 (dairy industry)	-	0.0	37.1	-	0.0	32.05	-	0.0	37.9	-	0.0	32.37	-	-	-	-	-	-	NA	NA	NA	NA	2	b
2022	3742	Vacuum cleaner dust P51 E2E2 (dairy industry)	-	0.0	0.0	-	0.0	27.14 (no amp)	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	b
2023	**550**	**Vacuum cleaner dust n°1 (non-probiotic dairy industry)**	+	22.1	39.1	+	19.05	34.26	+	20.9	37.4	+	18.22	36.38	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	**552**	**Vacuum cleaner dust n°3 (non-probiotic dairy industry)**	+	28.1	37.3	+	24.28	33.48	+	27.9	38.6	+	25.29	32.03	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	**553**	**Vacuum cleaner dust n°4 (non-probiotic dairy industry)**	+	22.2	36.9	+	17.98	33.14	+	20.6	36.9	+	18.04	37.07	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	**554**	**Vacuum cleaner dust n°5 (non-probiotic dairy industry)**	+	25.5	38.0	+	22.60	33.30	+	25.0	39.0	+	24.06	32.14	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	556	Vacuum cleaner dust n°7 (non-probiotic dairy industry)	-	0.0	36.9	-	0.0	32.89	-	0.0	38.1	-	0.0	32.84	-	-	-	-	-	-	NA	NA	NA	NA	2	b
2023	557	Vacuum cleaner dust n°8 (non-probiotic dairy industry)	-	0.0	32.8	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	b
2023	558	Vacuum cleaner dust n°9 (non-probiotic dairy industry)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	b
2023	559	Vacuum cleaner dust n°10 (non-probiotic dairy industry)	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	-	-	-	NA	NA	NA	NA	2	b
2023	**560**	**Vacuum cleaner dust n°11-12 (non-probiotic dairy industry)**	+	21.7	0.0	+	17.94	0.0	+	22.5	0.0	+	19.32	0.0	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	**561**	**Vacuum cleaner dust n°13-14 (non-probiotic dairy industry)**	+	23.3	37.1	+	19.55	33.08	+	22.4	37.3	+	20.17	33.31	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	**562**	**Vacuum cleaner dust n°15-16 (non-probiotic dairy industry)**	+	21.3	0.0	+	18.66	0.0	+	22.3	0.0	+	19.5	0.0	+	+	+	+	+	+	PA	PA	PA	PA	2	b
2023	**1363**	**Vacuum cleaner dust 24 (dairy industry)**	-	0.0	35.8	-	0.0	32.7	-	0.0	38.1	-	0.0	32.99	-	-	-	-	-	-	NA	NA	NA	NA	2	b

PRODUCTION ENVIRONMENTAL SAMPLES																											
Year of analysis	Sample N°	Product	ISO 6579-1♦ (200 or 375g)	Alternative method: foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease- Pre-warmed BPW or Prewarmed BPW + vancomycin (10mg/L) or BPW- 16h-37°C + 72h at 3±2°C											Confirmation+ 72h at 3±2°C	Final result *Salmonella* spp. + 72h at 3±2°C				Agreement + 72h at 3±2°C				Category	Type
				PCR result+ 72h at 3±2°C																							
				foodproof® extraction						BAX lysis																	
				BAX Q7			LC 480 II			BAX Q7			LC 480 II														
			Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	All confirmation tests	foodproof® extraction		BAX lysis		foodproof® extraction		BAX lysis			
																	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II		
2023	**1364**	**Vacuum cleaner dust 22 (dairy industry)**	+	24.2	36.5	+	21.79	45.00	+	26.2	37.3	+	23.94	33.89	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	**1365**	**A32 Vacuum Cleaner Dust (Dairy Industry)**	+	39.0	37.3	+	37.25	32.72	+	38.8	38.1	+	38.12	32.76	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	**1366**	**Vacuum cleaner dust 29 (dairy industry)**	+	25.4	0.0	+	22.86	0.0	+	25.6	0.0	+	23.67	0.0	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	**1367**	**Vacuum cleaner dust 12 (dairy industry)**	+	29.3	0.0	+	26.6	26.01 (no amp)	+	30.6	0.0	+	27.94	0.0	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	**1368**	**Vacuum cleaner dust 20 (dairy industry)**	-	0.0	37.0	-	0.0	32.73	-	0.0	38.5	-	0.0	33.04	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**1369**	**Vacuum cleaner dust 26+P41 (dairy industry)**	+	37.0	37.1	+	33.85	33.25	+	38.2	38.3	+	34.63	33.00	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2023	**1370**	**Vacuum cleaner dust P102+16 (dairy industry)**	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	26.77	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**1371**	**Vacuum cleaner dust 27 (dairy industry)**	-	0.0	35.1	-	0.0	31.47	-	0.0	36.9	-	0.0	31.92	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	2	b
2023	**1899**	**Milk Powder Vacuum Cleaner Dusts (Dairy Industry)**	+	26.9	43.9	+	22.82	43.41	+	27.7	41.3	+	24.59	32.02	+	+	+	+	+	+	**PA**	**PA**	**PA**	**PA**	2	b
2022	3732	Milk Protein	-	0.0	36.4	-	0.0	33.32	-	0.0	38.6	-	0.0	32.84	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c
2022	3735	Whey	-	0.0	36.3	-	0.0	33.44	-	0.0	38.1	-	0.0	32.87	-	-	-	-	-	-	**NA**	**NA**	**NA**	**NA**	1	c

Appendix 5 – Relative level of detection study: raw data

Matrix: Maltodextrin (375g)
***Strain: Salmonella* Cerro Ad2152**
Seeding protocol with lyophilized strain storage for 2 weeks at ambient temperature
Protocol: Pre-warmed BPW - d 1/10 - 16 h at 37°C ± 1°C Total viable count: 8.0 x 10^1 CFU/g
PAIRED

N° sample	Level	Contamination level (CFU/sample) VRBG poor plate method	Contamination level (CFU/sample) MPN	ISO 6579-1♦ method						foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																					
				RVS		MKTTn				PCR result										Confirmation					Final result *Salmonella* spp.				Number positive samples / Total			
										foodproof® extraction						BAX Real-Time lysis procedure									foodproof® extraction		BAX Real-Time lysis procedure		foodproof® extraction		BAX Real-Time lysis procedure	
										BAX Q7			LC480			BAX Q7			LC480			RVS		MKTTn									
				XLD	ASAP	XLD	ASAP	Final result	Positive Results /Total	Ct FAM (*Salmonella* spp.)	Ct ROX (Internal control)	**Result**	Ct FAM (*Salmonella* spp.)	Ct ROX (Internal control)	**Result**	Ct FAM (*Salmonella* spp.)	Ct ROX (Internal control)	**Result**	Ct FAM (*Salmonella* spp.)	Ct ROX (Internal control)	**Result**	XLD	ASAP	XLD	ASAP	All confirmation tests (ISO 6579-1)	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC480	BAX Q7	LC480
685	0	/	/	-	-	-	-	-	0/5	0	0	-	0	0	-	0	0	-	0.0	0	-	-	-	-	-	- (*Crono-bacter* spp.+)	-	-	-	-	0/5	0/5	0/5	0/5
686				st	st	st	st	-		0	36.9	-	0	32.79	-	0	38.4	-	0.0	32.83	-	st	st	st	st	-	-	-	-	-				
687				st	st	st	st	-		0	36.7	-	0	33.27	-	0	37.9	-	0.0	32.79	-	st	st	st	st	-	-	-	-	-				
688				st	st	st	st	-		0	37.4	-	0	32.71	-	0	38.1	-	0.0	32.85	-	st	st	st	st	-	-	-	-	-				
689				st	st	st	st	-		0	37.2	-	0	32.83	-	0	38.3	-	0.0	32.86	-	st	st	st	st	-	-	-	-	-				
690	Low	0.4	0,5 [0,3-0,9]	st	st	st	st	-	9/20	0	35.7	-	0	33.05	-	0	38.3	-	-(24.98: no amp)	32.86	-	st	st	st	st	-	-	-	-	-	9/20	9/20	9/20	9/20
691				st	st	st	st	-		0	36.3	-	0	32.85	-	0	38.4	-	0.0	32.88	-	st	st	st	st	-	-	-	-	-				
692				st	st	st	st	-		0	37.1	-	0	33.06	-	0	37.9	-	0.0	33.13	-	st	st	st	st	-	-	-	-	-				
693				st	st	st	st	-		0	37.3	-	0	33.14	-	0	37.5	-	0.0	32.86	-	st	st	st	st	-	-	-	-	-				
694				st	st	st	st	-		0	36.9	-	0	32.85	-	0	38.2	-	0.0	33.07	-	st	st	st	st	-	-	-	-	-				
695				+p	+p	+p	+p	+		27.2	37.2	+	25.13	31.97	+	25.7	37.9	+	23.09	33.41	+	+p	+p	+p	+p	+	+	+	+	+				
696				st	st	st	st	-		0	36.8	-	0	32.63	-	0	38.2	-	0.0	32.85	-	st	st	st	st	-	-	-	-	-				
697				+p	+p	+p	+p	+		23.0	37.3	+	19.84	42.43	+	20.9	37.0	+	17.99	35.43	+	+p	+p	+p	+p	+	+	+	+	+				
698				+p	+p	+p	+p	+		20.3	37.4	+	17.66	45.00	+	20.8	37.2	+	17.56	35.39	+	+p	+p	+p	+p	+	+	+	+	+				
699				st	st	st	st	-		0	37.4	-	0	33.01	-	0	38.1	-	0.0	32.80	-	st	st	st	st	-	-	-	-	-				
700				+p	+p	+p	+p	+		34.6	37.0	+	31.93	32.29	+	34.1	38.6	+	31.80	32.68	+	+p	+p	+p	+p	+	+	+	+	+				
701				st	st	st	st	-		0	36.5	-	0	32.79	-	0	38.1	-	0.0	33.07	-	st	st	st	st	-	-	-	-	-				
702				+p	+p	+p	+p	+		24.4	37.4	+	22.52	38.28	+	22.4	37.4	+	20.36	34.74	+	+p	+p	+p	+p	+	+	+	+	+				
703				+p	+p	+p	+p	+		25.9	36.8	+	22.84	40.50	+	22.5	37.6	+	20.31	37.01	+	+p	+p	+p	+p	+	+	+	+	+				
704				+p	+p	+p	+p	+		36.4	36.5	+	33.49	32.67	+	33.9	38.3	+	31.89	32.47	+	+p	+p	+p	+p	+	+	+	+	+				
705				+p	+p	+p	+p	+		25.1	37.6	+	21.83	38.01	+	22.3	37.3	+	19.82	34.00	+	+p	+p	+p	+p	+	+	+	+	+				
706				st	st	st	st	-		0	36.4	-	34.61/ 34.62/ 35.58	32.12/ 31.95/ 31.96/	+/+/ +	0	37.8	-	0.0	33.15	-	st	st	st	st	-	-	-	-	-				
707				st	st	st	st	-		0	35.7	-	0	32.66	-	0	38.2	-	0.0	33.08	-	st	st	st	st	-	-	-	-	-				
708				st	st	st	st	-		0	36.8	-	0	33.11	-	0	37.5	-	0.0	33.12	-	st	st	st	st	-	-	-	-	-				
709				+p	+p	+p	+p	+		22.2	37.2	+	19.54	42.42	+	22.6	38.1	+	20.73	35.30	+	+p	+p	+p	+p	+	+	+	+	+				
710				+p	+p	+p	+p	+		23.9	37.9	+	21.02	40.45	+	19.8	37.3	+	17.48	38.15	+	+p	+p	+p	+p	+	+	+	+	+				
711				+p	+p	+p	+p	+		19.9	37.6	+	17.30	45.00	+	20.0	36.9	+	16.74	38.13	+	+p	+p	+p	+p	+	+	+	+	+				
712	High	2.6	2,0 [1,3-3,2]	+p	+p	+p	+p	+	5/5	21.4	37.5	+	17.99	\	+	19.9	37.4	+	16.97	37.19	+	+p	+p	+p	+p	+	+	+	+	+	5/5	5/5	5/5	5/5
713				+p	+p	+p	+p	+		22.7	37.5	+	20.64	39.56	+	27.4	38.1	+	21.93	32.82	+	+p	+p	+p	+p	+	+	+	+	+				
714				+p	+p	+p	+p	+		20.6	37.1	+	18.20	45.00	+	19.7	37.0	+	16.99	40.32	+	+p	+p	+p	+p	+	+	+	+	+				

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

Matrix: Stainless steel surface (4"x4") + sponge
Strains: *Salmonella* Livingstone Ad2702 + 10 x *Citrobacter freundii* 39 ==> *Salmonella Anatum Ad2718 + 10 x Citrobacter freundii 39*
Seeding protocol: Overnight at ambient temperature
Protocol: BPW 16 h at 37°C ± 1°C
PAIRED
Total viable count: <10 CFU/surface

N° sample	Level	Contamination level (CFU/sample)		ISO 6579-1♦ method						foodproof® *Salmonella* Plus *Cronobacter* Detection LyoKit - 5'Nuclease-																	
										PCR result													Final result *Salmonella* spp.				Number positive samples / Total			
										foodproof® extraction						BAX lysis						All confirmation tests (ISO6579-1)	foodproof® extraction		BAX Real-Time lysis procedure		foodproof® extraction		BAX lysis	
										BAX Q7			LC480 II			BAX Q7			LC480 II										
		Salmonella Anatum Ad2718	*C. freundii* 39	XLD	ASAP	XLD	ASAP	Final result	Positive Results /Total	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result	Ct FAM (*target*)	Ct ROX (IC)	Result.		BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II
1627	0	/	/	-	-	-	-	-	0/5	0.0	34.9	-	\	32.68	-	0.0	35.0	-	0.00	32.75	-	-	-	-	-	-	0/5	0/5	0/5	0/5
1628				-	-	-	-	-		0.0	35.4	-	\	32.51	-	0.0	35.6	-	0.00	32.77	-	-	-	-	-	-				
1629				-	-	-	-	-		0.0	35.4	-	\	32.55	-	0.0	35.6	-	0.00	32.88	-	-	-	-	-	-				
1630				-	-	st	st	-		0.0	35.8	-	\	33.10	-	0.0	36.4	-	0.00	32.70	-	-	-	-	-	-				
1631				-	-	-	-	-		0.0	35.0	-	\	32.64	-	0.0	36.0	-	0.00	32.97	-	-	-	-	-	-				
1632	Low	103.0	886.0	-	-	-	-	-	11/20	0.0	35.5	-	\	32.64	-	0.0	35.7	-	0.00	33.38	-	-	-	-	-	-	11/20	11/20	11/20	11/20
1633				-	-	-	-	-		0.0	35.9	-	\	32.57	-	0.0	35.7	-	0.00	33.00	-	-	-	-	-	-				
1634				+M	+p	+1/2	+p	+		18.8	36.2	+	16.57	45.00	+	20.0	36.6	+	17.97	37.58	+	+	+	+	+	+				
1635				+1/2	+M	+12	+M	+		18.7	36.1	+	16.42	45.00	+	19.7	36.7	+	17.68	36.67	+	+	+	+	+	+				
1636				+M	+M	+1/2	+M	+		20.6	36.3	+	18.16	45.00	+	20.4	36.5	+	18.11	37.07	+	+	+	+	+	+				
1637				-	-	-	-	-		0.0	34.6	-	36.89/ 36.98/ 0.0	32.57/ 32.61/ 32.83/ 32.58ne	+/+/-	0.0	35.9	-	0.00	32.78	-	-	-	-	-	-				
1638				+M	+p	+1/2	+p	+		19.7	35.7	+	16.93	45.00	+	21.2	36.2	+	18.86	36.17	+	+	+	+	+	+				
1639				+M	+p	+1/2	+p	+		19.3	36.0	+	16.80	45.00	+	20.7	36.3	+	18.24	37.26	+	+	+	+	+	+				
1640				-	-	-	-	-		0.0	35.5	-	0.0	32.70	-	0.0	35.7	-	0.00	32.63	-	-	-	-	-	-				
1641				+M	+p	+1/2	+M	+		23.2	37.1	+	20.54	45.00	+	19.8	36.4	+	17.76	35.95	+	+	+	+	+	+				
1642				st	st	st	st	-		0.0	35.6	-	\	32.71	-	0.0	36.8	-	0.00	32.85	-	-	-	-	-	-				
1643				+M	+M	+1/2	+M	+		22.3	37.0	+	19.8	38.91	+	19.4	36.4	+	17.48	35.99	+	+	+	+	+	+				
1644				-	-	-	-	-		0.0	36.2	-	\	32.49	-	0.0	36.2	-	0.00	32.95	-	-	-	-	-	-				
1645				+M	+M	+1/2	+p	+		20.5	36.1	+	17.8	41.26	+	20.5	36.5	+	18.58	36.51	+	+	+	+	+	+				
1646				+M	+p	+1/2	+M	+		26.9	35.4	+	23.91	32.71	+	27.6	36.9	+	25.36	31.92	+	+	+	+	+	+				
1647				+M	+M	+1/2	+M	+		19.6	35.7	+	17.10	45.00	+	20.2	36.9	+	17.68	40.10	+	+	+	+	+	+				
1648				-	-	-	-	-		0.0	34.9	-	36.80/ 0.0/ 0.0	32.46/ 32.72/ 32.28	+/-/-	0.0	36.0	-	37.17/ 0.0/ 0.0	32.96/ 33.52/ 33.16	+/-/-	-	-	-	-	-				
1649				-	-	-	-	-		0.0	35.3	-	\	32.64	-	0.0	36.0	-	0.00	32.89	-	-	-	-	-	-				
1650				+M	+p	+1/2	+M	+		19.3	36.0	+	16.9	45.00	+	20.7	36.4	+	18.59	36.80	+	+	+	+	+	+				
1651				st	st	st	st	-		0.0	35.3	-	\	32.75	-	0.0	37.3	-	0.00	32.68	-	-	-	-	-	-				
1652	High	309.0	2903.0	st	st	st	st	-	2/5	0.0	35.7	-	\	32.78	-	0.0	37.3	-	0.00	33.10	-	-	-	-	-	-	2/5	2/5	2/5	2/5
1653				+M	+p	+1/2	+p	+		23.3	36.4	+	20.86	41.45	+	19.7	36.5	+	17.37	39.34	+	+	+	+	+	+				
1654				-	-	-	-	-		0.0	35.3	-	0.0	32.68	-	0.0	36.2	-	0.00	33.14	-	-	-	-	-	-				
1655				+M	+M	+M	+p	+		19.2	36.2	+	16.91	42.35	+	19.9	36.9	+	17.74	37.99	+	+	+	+	+	+				
1656				-	-	-	-	-		0.0	36.6	-	\	32.17	-	0.0	36.1	-	0.00	33.23	-	-	-	-	-	-				

ne: new DNA extract

♦ 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

INCLUSIVITY - *Salmonella* spp.																			
No	Genus	Species	N°	Origin	Inoculation level (CFU/225mL)	foodproof® Salmonella Plus Cronobacter Detection LyoKit - 5'Nuclease-													
						BPW + vancomycin (10mg/L) - 16h at 37°C±1°C													
						foodproof® extraction						BAX lysis						Confirmation	
						BAX Q7			LC480 II			BAX Q7			LC480 II			RVS	
						Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result.	Ct FAM (target)	Ct ROX (IC)		XLD	ASAP
1	*Salmonella*	Abaetetuba	Ad2318	/	67	20	37.2	+	17.94	33.17	+	20.8	36.7	+	18.38	36.49		+	+
2	*Salmonella*	Aberdeen	CIP 105618	/	45	18.7	37	+	16.06	33.27	+	20.3	37.4	+	18.03	36.28		+	+
3	*Salmonella*	Abortusequi	Ad2321	/	6	28.6	37	+	26.49	32.89	+	39.5	37.3	+	35.20	33.10		+(H2S-)	- (no growth)
4	*Salmonella*	Abortusovis	Ad2320	Ovine foetus	0	26.3	36.9	+	24.08	32.83	+	35.4	37.9	+	31.77	33.01		+ (small and pale colonies)	- (no growth)
5	*Salmonella*	Adelaïde	Ad2319	Turkey breeding environment	48	23.5	36.6	+	21.24	32.98	+	30.3	38	+	25.19	32.44		+	- (blue colonies)
6	*Salmonella*	Agona	A00V038	Feed for pork	27	18.7	36.6	+	16.07	32.99	+	20.1	36.9	+	18.31	35.54		+	+
7	*Salmonella*	Anatum	A00E007	Dusts	24	20	37	+	17.37	33.05	+	19.6	37	+	17.63	37.39		+	+
8	*Salmonella*	*arizonae* 51: z4, z24: -	CIP 55.23	Turkey meat	34	22.6	36.6	+	19.99	32.92	+	24.3	37.6	+	20.25	34.66		+	+(pale colonies)
9	*Salmonella*	*arizonae* 48: z4, z23: -	Ad1850	Poultry environmental sample	81	22	36.8	+	18.81	32.97	+	24.9	37.8	+	20.13	38.02		+	+
10	*Salmonella*	Bardo	Adria 569	Meat for sausage	59	19.7	36.4	+	17.28	33.59	+	20	36.9	+	18.23	35.87		+ (irregular colonies)	+
11	*Salmonella*	Bareilly	Ad1687	Chocolate industry	39	19.8	36.6	+	17.71	33.14	+	21.4	37.3	+	18.56	39.57		+	+
12	*Salmonella*	Blockley	Ad923	Poultry environment	72	18.3	37.3	+	15.24	33.12	+	19.8	37.2	+	17.50	37.56		+	+
13	*Salmonella*	*bongori 66: z35:* -	Ad 598	Environmental sample	21	19.2	36.4	+	16.48	32.81	+	19.4	36.8	+	17.02	32.8		+	+(pale colonies)
14	*Salmonella*	Bovismorbificans	Adria 6629	Sausage	28	19.6	36.4	+	16.75	33.37	+	19.8	37.2	+	18.56	35.56		+	+
15	*Salmonella*	Braenderup	Adria 111	Pork meat	44	18.9	36.8	+	16.71	32.91	+	20.3	36.8	+	18.71	33.05		+	+
16	*Salmonella*	Brandenburg	Ad351	Seafood cocktail	45	18.6	36.7	+	16.65	33.26	+	19.9	36.9	+	18.07	37.59		+	+
17	*Salmonella*	Bredeney	Adria 396	Ground beef	26	19.4	37.1	+	17.50	33.27	+	20.1	36.6	+	17.54	37.71		+	+
18	*Salmonella*	Caracas	Ad2322	Spice	35	19.2	36.8	+	16.87	33.00	+	20.5	37	+	17.77	37.98		+	+
19	*Salmonella*	Cerro	Ad689	Dehydrated poultry protein	37	20.6	37.2	+	18.57	33.11	+	19.6	37	+	17.54	36.54		+	+
20	*Salmonella*	Chester	CIP 103543	/	20	21.3	37.1	+	18.93	33.06	+	21.3	37.2	+	19.04	36.00		+	+
21	*Salmonella*	Cubana	Ad2323	Dust feed environment	66	19.8	38.2	+	18.57	33.82	+	20.5	37.1	+	18.94	37.86		+	+
22	*Salmonella*	Derby	Ad1093	Fish fillet	37	19.6	37.8	+	17.88	33.24	+	19.7	37	+	18.71	39.19		+	+
23	*Salmonella*	*diarizonae* 38*:* lv: z53	Ad451	Ewe milk cheese	71	19.4	37.2	+	17.55	33.34	+	19.3	37.3	+	18.64	38.15		+ (pale colonies)	+
24	*Salmonella*	*diarizonae* 61*:* k:1,5,7	Ad1300	Raw ewe milk	38	18	37.8	+	16.37	33.37	+	19.6	36.9	+	18.02	36.44		+	+
25	*Salmonella*	Dublin	Ad529	Beef meat	52	17.8	37.8	+	16.18	33.22	+	19.2	37.2	+	18.56	38.48		+	+
26	*Salmonella*	Emek	Ad333	/	25	18.4	37.6	+	16.50	33.17	+	19.9	37.1	+	18.88	38.18		+ (pale colonies)	+
27	*Salmonella*	Enteritidis	Ad477	Hen meat	35	18.3	37.8	+	16.37	33.06	+	19.8	37.5	+	18.75	38.12		+	+
28	*Salmonella*	Gallinarum biovar pullorum	Ad300	Poultry environment	5	25.8	37.8	+	24.29	33.32	+	33.3	36.4	+	30.57	32.65		+ (pale and little colonies)	+ (pale and little colonies)
29	*Salmonella*	Gaminara	Ad2324	Boar meat	55	19.3	37.5	+	17.66	33.04	+	19.9	36.9	+	18.37	38.29		+	+
30	*Salmonella*	Give	Adria 436	Ground beef	34	18.1	37.9	+	16.07	33.19	+	19.8	36.8	+	18.19	38.75		+	+
31	*Salmonella*	Guinea	Adria 29	/	36	18.5	37.7	+	16.95	33.38	+	19.4	37.2	+	17.62	37.97		+(H2S-)	+
32	*Salmonella*	Hadar	Adria 24871	Chicken meat	60	20.5	37.7	+	19.13	33.18	+	19.1	36.9	+	18.13	41.17		+	+
33	*Salmonella*	Havana	Ad930	Poultry environment	70	20.4	37.5	+	18.84	33.05	+	19.6	36.6	+	18.47	40.14		+	+
34	*Salmonella*	Heidelberg	A00E005	Dusts from dairy industry	24	21.1	37.8	+	19.77	33.31	+	19.8	37	+	18.23	39.49		+	+
35	*Salmonella*	*houtenae* 1,40: z4: z23: -	Ad2682	Primary production sample(poultry)	64	18.3	36.9	+	16.50	32.62	+	21.7	37.3	+	19.12	33.05		+	+
36	*Salmonella*	Hvittingfoss	Ad2325	Raw stuff	50	18.5	38.7	+	16.62	33.27	+	19.2	37.2	+	17.98	38.83		+	+
37	*Salmonella*	Indiana	Ad174	White cheese	44	20.1	38	+	18.64	32.82	+	20.1	37	+	18.59	40.23		+	+

INCLUSIVITY - *Salmonella* spp.																			
No	Genus	Species	N°	Origin	Inoculation level (CFU/225mL)	foodproof® Salmonella Plus Cronobacter Detection LyoKit - 5'Nuclease-													
						BPW + vancomycin (10mg/L) - 16h at 37°C±1°C													
						foodproof® extraction						BAX lysis						Confirmation	
						BAX Q7			LC480 II			BAX Q7			LC480 II			RVS	
						Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result.	Ct FAM (target)	Ct ROX (IC)		XLD	ASAP
38	*Salmonella*	*indica* 1,6,14,25: a: enx	Ad 600	Environmental sample	52	22.3	37.2	+	20.07	33.32	+	23.5	37.1	+	19.92	32.8		+(pale colonies)	+
39	*Salmonella*	*Indica* 11: b: e,n,x	Ad2337	Chicken breeding environment	25	24.4	36.9	+	22.02	32.93	+	22.2	36.7	+	19.58	32.16		+(pale colonies)	+
40	*Salmonella*	Infantis	F401B	Cheese	51	22.1	38.1	+	20.62	33.12	+	19.5	37	+	17.75	39.02		+	+
41	*Salmonella*	Javiana	Ad2326	Turkey meat	25	21.1	37.1	+	18.84	42.70	+	20.3	37.2	+	18.36	40.43		+	+
42	*Salmonella*	Kedougou	Ad929	Bovine environmental sample	13	23.7	37.2	+	20.88	45.00	+	21.0	37.7	+	18.64	37.59		+	+
43	*Salmonella*	Kentucky	Ad1756	Poultry environmental sample	6	24.7	36.8	+	23.72	36.87	+	26.2	37.5	+	25.58	32.23		+	+
44	*Salmonella*	Kottbus	Adria 1	Poultry environmental sample	24	19.3	37.6	+	15.92	0.0	+	20.6	38.0	+	18.32	37.66		+	+
45	*Salmonella*	Landau	Ad499	/	35	19.4	37.9	+	16.83	45.00	+	21.0	37.7	+	18.52	36.88		+	+
46	*Salmonella*	Lille	Adria 37	Food product	38	21.6	37.4	+	19.44	34.69	+	21.2	37.6	+	18.18	36.54		+ (pale black center)	+(irregular colonies)
47	*Salmonella*	Livingstone	Ad1107	Dusts	24	21.6	37.4	+	19.21	40.08	+	20.5	37.6	+	17.81	35.56		+	+
48	*Salmonella*	London	Adria 326	Cooked meat sample	44	25.1	37.3	+	24.07	33.43	+	25.3	36.9	+	24.5	32.04		+	+
49	*Salmonella*	Luciana	CIP 105626	/	13	18.5	37.4	+	16.29	41.80	+	21.6	37.7	+	19.84	34.17		+ (pale black center)	- (blue colonies)
50	*Salmonella*	Manhattan	Adria 900	Dusts from dairy industry	32	22.7	37.1	+	20.06	45.00	+	20.7	38.5	+	18.46	45.00		+	+
51	*Salmonella*	Maracaibo	CIP 54143	/	12	21.7	37.2	+	18.48	45.00	+	23.7	37.4	+	19.23	37.60		+	+
52	*Salmonella*	Marseille	CIP105627	/	36	25.2	36.8	+	22.24	42.24	+	22.0	37.4	+	19.70	33.91		+	+
53	*Salmonella*	Mbandaka	Ad914	Mayonnaise	25	23.4	36.9	+	21.19	35.51	+	21.3	37.0	+	18.53	35.20		+	+
54	*Salmonella*	Meleagridis	Adria 505	Raw milk	18	21.6	37.5	+	19.11	41.14	+	21.1	37.7	+	18.73	34.92		+	+
55	*Salmonella*	Michigan	Ad2327	Low moisture sausage	46	21.4	37.3	+	18.90	42.33	+	20.3	37.2	+	17.92	33.88		+	+
56	*Salmonella*	Mikawasima	Ad1811	Raw ewe milk	48	23	36.9	+	22.27	38.94	+	27.4	37.4	+	25.67	32.06		+	+
57	*Salmonella*	Minnesota	Ad2328	Feed	76	20.1	37.2	+	17.55	45.00	+	21	37.7	+	18.10	36.46		+	+
58	*Salmonella*	Missisipi	Ad2329	Parakeet	53	19.8	37.5	+	17.48	45.00	+	21.5	37.2	+	19.27	35.69		+	+
59	*Salmonella*	Montevideo	Ad912	Raw milk	44	21.5	37.3	+	18.83	42.01	+	20.7	36.9	+	17.94	34.05		+	+(irregular colonies)
60	*Salmonella*	Muenchen	CIP 106178	/	29	21.6	37.7	+	19.01	45.00	+	20.6	37.5	+	18.20	38.48		+	+
61	*Salmonella*	Napoli	Ad 928	Clinical	46	20	37.7	+	18.02	33.16	+	21.0	37.4	+	17.87	34.95		+	+
62	*Salmonella*	Newport	Adria 586	Sausage	14	20.6	37.8	+	18.80	33.51	+	21.4	37.8	+	18.45	35.93		+	+
63	*Salmonella*	Norwich	Ad1172	/	16	19	37.7	+	16.94	33.62	+	20.2	37.2	+	17.13	37.54		+	+
64	*Salmonella*	Ohio	Ad1482	Raw cow milk	11	19.4	37.7	+	17.61	33.49	+	20.9	37.2	+	18.32	38.16		+	+
65	*Salmonella*	Orion	Adria 27	/	11	23.2	37.6	+	21.70	33.10	+	32	38	+	28.96	32.73		+	+(pale colonies)
66	*Salmonella*	Oranienburg	Ad1724	Cereals	39	20.1	38.1	+	18.49	33.02	+	20.3	37.2	+	18.29	36.60		+	+
67	*Salmonella*	Ouakam	Ad1647	Compost	30	20.5	37.7	+	18.87	32.81	+	20.0	37.3	+	17.97	36.60		+	+
68	*Salmonella*	Panama	Adria 8	Ground beef	22	24.7	37.5	+	22.88	33.15	+	20.1	37.1	+	18.10	38.18		+	+
69	*Salmonella*	Paratyphi A	ATCC 9150	/	22	20.6	37.2	+	18.89	33.08	+	20.5	37.3	+	17.71	35.68		+(H2S-)	+(pale and small colonies)
70	*Salmonella*	Paratyphi B	Ad301	Clinical	25	18.1	37.5	+	16.32	32.35	+	19.9	37.9	+	17.58	37.47		+	+
71	*Salmonella*	Paratyphi C	ATCC 13428	/	55	19.7	36.9	+	17.08	32.87	+	22.4	37.2	+	19.13	33.02		+	+(pale colonies)
72	*Salmonella*	Pomona	CIP105630	/	42	20.1	37.5	+	18.59	32.93	+	20.4	37.4	+	18.80	36.26		+	+
73	*Salmonella*	Poona	Ad2330	Poultry feed	38	22.8	37.8	+	21.30	33.33	+	20.0	37.4	+	17.47	39.79		+	+
74	*Salmonella*	Putten	Ad2331	Feed for chicken	47	22.2	37.4	+	20.21	32.87	+	21.0	37.2	+	18.34	36.66		+	+
75	*Salmonella*	Regent	Adria 328	Duck	13	20.2	37.2	+	18.42	33.64	+	22.1	37.5	+	19.38	34.99		+	+
76	*Salmonella*	Rissen	Adria 39	Food product	28	21.7	37.2	+	20.44	33.16	+	21.2	37.7	+	18.75	37.79		+	+
77	*Salmonella*	Rubislaw	Ad2332	Shark cartilage	52	18.7	37.5	+	16.87	33.63	+	19.7	37	+	17.54	36.43		+	+

INCLUSIVITY - *Salmonella* spp.																			
No	Genus	Species	N°	Origin	Inoculation level (CFU/225mL)	foodproof® Salmonella Plus Cronobacter Detection LyoKit - 5'Nuclease-													
						BPW + vancomycin (10mg/L) - 16h at 37°C±1°C													
						foodproof® extraction						BAX lysis						Confirmation	
						BAX Q7			LC480 II			BAX Q7			LC480 II			RVS	
						Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result.	Ct FAM (target)	Ct ROX (IC)		XLD	ASAP
78	*Salmonella*	Saintpaul	Adria F31	Pilchard fillets	26	19.0	37.5	+	16.91	32.90	+	20.3	36.9	+	17.36	37.72		+	+
79	*Salmonella*	*salamae* 42,b:e,n,x,z15	Ad 593	Cereals	37	23.0	37.3	+	21.16	33.54	+	22.4	36.7	+	18.54	34.86		+	+(pale colonies)
80	*Salmonella*	Schwarzengrund	Ad2333	Egg products environment	39	19.1	37.4	+	17.02	33.35	+	19.8	37.2	+	16.81	37.82		+	+
81	*Salmonella*	Senftenberg	Ad 355	Seafood cocktail	14	18.8	36.7	+	16.18	45.00	+	20.5	37.2	+	18.18	35.53		+	+
82	*Salmonella*	Stanley	Ad 1688	Chocolate industry	20	20.1	36.6	+	17.45	45.00	+	19.9	37.3	+	17.12	38.76		+	+
83	*Salmonella*	Stourbridge	Ad2297	Raw milk cheese	18	18.8	37	+	16.57	40.49	+	20.8	37.2	+	18.94	36.43		+	+(large colonies)
84	*Salmonella*	Strasbourg	CIP105632	/	17	23.2	36.6	+	20.62	41.22	+	21.8	37	+	18.99	35.51		+	- (blue colonies)
85	*Salmonella*	Tananarive	CIP54142	/	36	20.5	36.8	+	17.97	40.75	+	20.2	37.2	+	17.58	38.19		+	+
86	*Salmonella*	Tennessee	A00E006	Dusts from dairy industry	38	18.6	37.2	+	16.18	43.42	+	19.9	37	+	17.53	37.42		+	+
87	*Salmonella*	Thompson	AER301	Poultry	33	19.9	37.3	+	17.14	42.32	+	19.7	37.3	+	17.27	37.18		+	+
88	*Salmonella*	Typhi	Ad302	Clinical	24	19.6	36.8	+	17.24	45.00	+	21.6	36.9	+	19.35	33.29		+ (yellow colonies)	+
89	*Salmonella*	Typhimurium	Ad1070	Pork meat	25	19.8	37.2	+	17.07	0.0	+	21.0	37.2	+	18.29	36.23		+	+
90	*Salmonella*	Typhimurium 1,4 [5], I2:-:-	Ad1333	Tiramisu	74	18.1	37.1	+	15.75	34.18	+	20.5	37.3	+	18.05	36.05		+	+
91	*Salmonella*	Typhimurium 1,4 [5], I2:-:1,2	Ad1335	Poultry environmental sample	64	19.2	36.7	+	16.29	43.00	+	21.3	37.2	+	18.02	38.57		+	+
92	*Salmonella*	Typhimurium 1,4 [5], II2:i:-	Ad1334	Ready to cook pork	50	19.6	37.1	+	17.01	42.78	+	20.5	37.1	+	17.45	37.98		+	+
93	*Salmonella*	Urbana	Ad2334	Shrimps	30	19.2	36.8	+	16.53	45.00	+	20.0	36.9	+	17.71	39.26		+	+
94	*Salmonella*	Veneziana	Adria 233	Food product	22	18.7	37.3	+	16.43	0.0	+	20.1	37.4	+	17.62	37.76		+	+
95	*Salmonella*	Virchow	Adria F276	Curry	24	19.7	37.4	+	16.89	37.34	+	20.2	37.3	+	17.34	39.11		+	+
96	*Salmonella*	Wandsworth	Ad2335	Fillet of mullet	44	17.7	36.8	+	15.53	45.00	+	20.4	37	+	17.32	42.11		+	+
97	*Salmonella*	Waycross	CIP105634	/	23	17.9	37	+	15.63	45.00	+	20.5	36.8	+	18.17	35.94		+(large colonies)	+
98	*Salmonella*	Wayne	Ad502	/	37	18.2	37.1	+	15.80	37.13	+	20.9	37	+	18.56	36.67		+(large colonies)	+
99	*Salmonella*	Weltevreden	Ad2336	Treated water	36	19.1	37	+	16.59	45.00	+	20.1	37.5	+	18.20	36.25		+	+
100	*Salmonella*	Worthington	Adria 3506	Pâté	42	20.4	36.4	+	17.88	45.00	+	20	37.2	+	17.20	39.97		+	+

EXCLUSIVITY																
					foodproof® Salmonella Plus Cronobacter Detection LyoKit - 5'Nuclease-											
					BPW + vancomycin (10mg/L) - 16h at 37°C±1°C											
					foodproof® extraction						BAX lysis					
					BAX Q7			LC480 II			BAX Q7			LC480 II		
No	Strain	N°	Origin	Inoculation level (CFU/mL)	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result	Ct FAM (target)	Ct ROX (IC)	Result
1	*Citrobacter braakii*	Ad833	Raw beef meat	$2{,}9.10^5$	0.0	34.6	-	0.0	31.46	-	0	35.7	-	0	32.52	-
2	*Citrobacter Diversus*	Adria 140	Raw milk	$4{,}0.10^5$	0.0	36.1	-	0.0	31.38	-	0	36.2	-	0	32.3	-
3	*Citrobacter freundii*	Adria 23	Raw pork sausage	$3{,}5.10^5$	0.0	35	-	0.0	31.32	-	0	35.6	-	0	31.76	-
4	*Citrobacter freundii*	Adria 175	Raw duck meat	$2{,}1.10^5$	0.0	34.5	-	0.0	31.80	-	0.0/ 0.0	0.0/3 6.6	i/-*	0	31.22	-
5	*Citrobacter koseri*	Adria 71	Frozen vegetables	$5{,}8.10^5$	0.0	34.1	-	0.0	31.45	-	0	34.9	-	0	31.34	-
6	*Enterobacter agglomerans*	Adria 11	Cheese	$2{,}7.10^5$	0.0	34.8	-	0.0	31.94	-	0	35.3	-	0	33.06	-
7	*Enterobacter amnigenus*	A00C068	Raw poultry meat	$2{,}4.10^5$	0.0	36.8	-	0.0	32.70	-	0	36.2	-	0	32.88	-
8	*Enterobacter cloacae*	Adria 10	Raw milk	$2{,}1.10^5$	0.0	36.2	-	0.0	32.10	-	0	36.6	-	0	33.09	-
9	*Enterobacter intermedius*	Adria 60	Bean	$3{,}0.10^5$	21.8/ 0.0	37.6/ 36.7	-	19.82/ 0.0	33.11 / 32.32	-	22.8/ 0.0	37.3/ 36.7	-	21.22/ 21.17/ 20.70/ 19.65/ 19.49/ 0.0	40.45/ 40.04/ 40.30/ 42.25/ 45.00/ 33.05	-
10	*Enterobacter kobei*	Ad 342	Ham	$2{,}0.10^5$	0.0	36.6	-	0.0	31.49	-	0	37	-	0	33.1	-
11	*Cronobacter sakazakii*	Adria 95	Fermented milk	$2{,}4.10^5$	0.0	0	-	0.0	0.0	-	0	0	-	0	0	-
12	*Erwinia carotovora*	CIP 8283	Potatoes	$3{,}6.10^5$	0.0	37.4	-	0.0	32.64	-	0	37.4	-	0	33	-
13	*Escherichia coli*	Adria 19	Grated carrots	$2{,}2.10^5$	0.0	36.4	-	0.0	32.29	-	0	36.5	-	0	32.79	-
14	*Escherichia hermanii*	Ad461	Dessert	$1{,}5.10^5$	0.0	36.6	-	0.0	31.95	-	0	36.8	-	0	32.85	-
15	*Escherichia vulneris*	Adria 132	Veal liver	$1{,}0.10^5$	0.0	35.4	-	0.0	32.63	-	0	36.7	-	0	32.68	-
16	*Hafnia alvei*	Adria 167	Raw pork sausage	$4{,}0.10^5$	0.0	36.3	-	31.37 (no amp)	32.53	-	0	36.4	-	0	32.78	-
17	*Klebsiella oxytoca*	Adria 57	Food product	$2{,}8.10^5$	0.0	36.3	-	0.0	32.12	-	0	37	-	0	32.85	-
18	*Klebsiella pneumoniae*	Adria 47	Raw turkey meat	$2{,}8.10^5$	0.0	36.9	-	0.0	31.90	-	0	36.6	-	0	33.06	-
19	*Kluyvera spp*	Adria 41	Raw milk	$1{,}3.10^5$	0.0	35.7	-	0.0	31.78	-	0	35.1	-	18.94 (no amp)	32.93	-
20	*Morganella morganii*	CIP A236	/	$4{,}7.10^5$	0.0	36.3	-	0.0	33.43	-	0	38	-	0	33.07	-
21	*Pantoea agglomerans*	Adria 62	Frozen vegetables	$6{,}4.10^5$	0.0	37	-	0.0	32.25	-	0	36.7	-	0	33.17	-
22	*Proteus mirabilis*	Ad639	Mayonnaise	$5{,}9.10^5$	0.0	36.1	-	0.0	33.09	-	0	37.3	-	27.0 (no amp)	32.93	-
23	*Proteus vulgaris*	Adria 43	Sliced ham	$5{,}6.10^5$	0.0	36.9	-	0.0	32.73	-	0	38	-	0	33.16	-
24	*Providencia rettgeri*	Adria 112	White liquid egg	$1{,}9.10^5$	0.0	37.2	-	0.0	33.51	-	0	38.3	-	0	33.14	-
25	*Rhanella aquatilis*	Adria 69	Molluscs	$1{,}7.10^5$	0.0	36.1	-	0.0	32.67	-	0	37.1	-	0	33.15	-
26	*Serratia liquefaciens*	Adria 26	Egg product	$6{,}4.10^4$	0.0	35.1	-	0.0	32.36	-	0	37	-	0	32.95	-
27	*Serratia proteomaculans*	A00C056	Ham	$2{,}2.10^5$	0.0	36.2	-	0.0	32.80	-	0	37.4	-	0	33.09	-
28	*Shigella flexneri*	CIP 8248	/	$1{,}1.10^4$	0.0	35.9	-	0.0	32.43	-	0	36.6	-	15.46 (no amp)	33.17	-
29	*Shigella sonnei*	CIP 8249T (ATCC 29930)	/	$3{,}4.10^4$	0.0	35.4	-	0.0	32.52	-	0	36.3	-	0	32.94	-
30	*Yersinia enterocolotica*	Adria 32	Bacon	$7{,}3.10^4$	0.0	35.7	-	0.0	32.63	-	0	37	-	0	33.17	-

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

Laboratory **A**
Lactic acid bacteria: >3.10^5 CFU/g

DNA extraction:	BAX Lysis
Thermocycler:	Lightcycler480

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit												Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*				
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
4	-	-	-	-	/	-	+	40.47	+	+	+	+	-	-	+	+	+	PD
7	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
8	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
16	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
21	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
24	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
2	-	-	-	-	/	-	+	20.44	-	+	+	+	+	+	+	+	+	PD
3	+	+	+	+	+	+	+	38.09	+	+	+	+	-	-	+	+	+	PA
6	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
10	+	+	+	+	+	+	+	22.58	+	+	+	+	+	+	+	+	+	PA
14	+	+	+	+	+	+	+	21.65	+	+	+	+	+	+	+	+	+	PA
15	-	+	-	-	-	-	+	28.60	-	+	+	+	+	+	+	+	+	PD
19	-	-	-	-	/	-	+	19.51	+	+	+	+	-	-	+	+	+	PD
23	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
5	-	-	-	-	/	-	+	21.89	-	+	+	+	+	+	+	+	+	PD
9	+	+	+	+	+	+	+	22.04	+	+	+	+	+	+	+	+	+	PA
11	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
12	+	+	+	+	+	+	+	27.62	-	+	+	+	+	+	+	+	+	PA
17	-	+	-	-	-	-	+	18.70	+	+	+	+	+	+	+	+	+	PD
18	+	+	+	+	+	+	+	18.25	+	+	+	+	+	+	+	+	+	PA
20	-	+	-	-	-	-	+	18.63	+	+	+	+	+	+	+	+	+	PD
22	+	+	+	+	+	+	+	23.83	-	+	+	+	+	+	+	+	+	PA

Laboratory **B**
Lactic acid bacteria: 1.33 x 10^7 CFU/g

DNA extraction:	BAX lysis
Thermocycler:	BAX Q7

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit												Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation							Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test	Confirmation final result *Salmonella* spp.		
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*				
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
4	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
7	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
8	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
16	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
21	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
24	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
2	+	+	+	+	+	+	+	28.8	-	+	+	+	+	+	+	+	+	PA
3	+	+	+	+	+	+	-	/	-	-	-	+	-	-	-	-	-	ND
6	-	-	-	-	/	-	-	/	-	-	-	+	-	-	-	-	-	NA
10	+	+	+	+	+	+	+	23.1	-	+	+	+	+	+	+	+	+	PA
14	-	+	-	-	-	-	-	/	+	-	-	-	-	-	/	-	-	NA
15	-	+	-	-	-	-	-	/	+	-	-	-	-	-	/	-	-	NA
19	-	+	-	-	-	-	-	/	+	-	-	-	-	-	/	-	-	NA
23	-	-	-	-	/	-	+	24.2	-	+	+	+	+	+	+	+	+	PD
5	+	+	+	+	+	+	+	24.2	+	+	+	+	+	+	+	+	+	PA
9	+	+	+	+	+	+	+	25.0	-	+	+	+	+	+	+	+	+	PA
11	+	+	+	+	+	+	-	/	-	-	-	+	-	-	-	-	-	ND
12	+	+	+	+	+	+	+	24.1	-	+	+	+	+	+	+	+	+	PA
17	+	+	+	+	+	+	-	/	-	-	-	+	-	-	-	-	-	ND
18	+	+	+	+	+	+	+	25.2	-	+	+	+	+	+	+	+	+	PA
20	+	+	+	+	+	+	+	25.7	-	+	+	+	+	+	+	+	+	PA
22	+	+	+	+	+	+	+	25.6	+	+	+	+	+	+	+	+	+	PA

Laboratory **C**
Lactic acid bacteria: 6.6 x 10^6 CFU/g

DNA extraction:	BAX Lysis
Thermocycler:	BAX Q7

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*			*Salmonella* spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		XLD Typical colonies (+/-)	*Brilliance Salmonella* Typical colonies (+/-)	XLD Typical colonies (+/-)	*Brilliance Salmonella* Typical colonies (+/-)				
1	+	+	+	+	-/-	-	-	/	+	-	-	-	-	-	/	-	-	NA
4	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
7	-	-	-	-	/	-	-	/	+	-	+	+	+	+	+	+	-	$NA_{FN(alt)}$
8	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
16	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
21	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
24	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
2	+	+	+	+	-/-	-	-	/	+	-	-	-	-	-	/	-	-	NA
3	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
6	+	+	+	+	+	+	+	38.1	+	+	+	+	+	+	+	+	+	PA
10	+	+	+	+	+	+	+	25.6	-	+	+	+	+	+	+	+	+	PA
14	+	+	+	+	+	+	+	23.9	-	+	+	+	+	+	+	+	+	PA
15	+	+	+	+	+	+	+	24.3	-	+	+	+	+	+	+	+	+	PA
19	+	+	+	+	-/-	-	-	/	+	-	-	-	-	-	/	-	-	NA
23	-	-	-	-	/	-	+	33.5	+	+	+	+	+	+	+	+	+	PD
5	+	+	+	+	+	+	+	23.3	-	+	+	+	+	+	+	+	+	PA
9	+	+	+	+	+	+	+	26	-	+	+	+	+	+	+	+	+	PA
11	+	+	+	+	+	+	+	23.1	+	+	+	+	+	+	+	+	+	PA
12	+	+	+	+	+	+	+	24.2	-	+	+	+	+	+	+	+	+	PA
17	+	+	+	+	+	+	+	25.2	-	+	+	+	+	+	+	+	+	PA
18	-	-	-	-	/	-	+	27.0	+	+	+	+	+	+	+	+	+	PD
20	+	+	+	+	+	+	+	27.9	+	+	+	+	+	+	+	+	+	PA
22	+	+	+	+	+	+	+	27.0	-	+	+	+	+	+	+	+	+	PA

Laboratory **D1**
Lactic acid bacteria: 8.7 x 10^6 CFU/g

DNA extraction:	BAX lysis
Thermocycler:	Bax Q7

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn					
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*	Latex test			
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
4	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
7	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
8	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
16	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
21	-	-	-	-	/	-	+	44.1	+	+	-	-	-	-	/	-	-	**$PD_{FP(alt)}$**
24	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
2	-	-	-	-	/	-	+	31.0	+	+	+	+	+	+	+	+	+	**PD**
3	+	+	+	+	+	+	+	32.2	-	+	+	+	+	+	+	+	+	**PA**
6	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	**ND**
10	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	**ND**
14	+	+	+	+	+	+	+	31.1	+	+	+	+	+	+	+	+	+	**PA**
15	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	**ND**
19	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	**ND**
23	-	-	-	-	/	-	+	30.0	-	+	+	+	+	+	+	+	+	**PD**
5	-	-	-	-	/	-	+	31.8	-	+	+	+	+	+	+	+	+	**PD**
9	-	-	-	-	/	-	+	31.6	+	+	+	+	+	+	+	+	+	**PD**
11	+	+	+	+	+	+	+	34.6	-	+	+	+	+	+	+	+	+	**PA**
12	+	+	+	+	+	+	+	31.9	-	+	+	+	+	+	+	+	+	**PA**
17	+	+	+	+	+	+	+	31.1	-	+	+	+	+	+	+	+	+	**PA**
18	+	+	+	+	+	+	+	30.7	-	+	+	+	+	+	+	+	+	**PA**
20	+	+	+	+	+	+	+	33.2	-	+	+	+	+	+	+	+	+	**PA**
22	+	+	+	+	+	+	+	35.9	-	+	+	+	+	+	+	+	+	**PA**

Laboratory **D2**
Lactic acid bacteria: 9.5 x 10^6 CFU/g

DNA extraction:	BAX lysis
Thermocycler:	Bax Q7

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*			*Salmonella* spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		XLD Typical colonies (+/-)	*Brilliance Salmonella* Typical colonies (+/-)	XLD Typical colonies (+/-)	*Brilliance Salmonella* Typical colonies (+/-)				
27	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
29	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
30	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
36	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
37	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
42	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
44	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
48	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	**ND**
28	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
32	-	-	-	-	/	-	+	30.9	+	+	+	+	+	+	+	+	+	**PD**
33	-	-	-	-	/	-	+	32.1	+	+	+	+	+	+	+	+	+	**PD**
34	+	+	+	+	+	+	+	32.1	+	+	+	+	+	+	+	+	+	**PA**
38	-	-	-	-	/	-	+	30.8	-	+	+	+	+	+	+	+	+	**PD**
43	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
45	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
46	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
25	-	-	-	-	/	-	-	/	-	-	-	-	-	-	/	-	-	**NA**
26	-	-	-	-	/	-	+	28.7	-	+	+	+	+	+	+	+	+	**PD**
31	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	**ND**
35	+	+	+	+	+	+	+	31.1	-	+	+	+	+	+	+	+	+	**PA**
39	+	+	+	+	+	+	+	31.4	-	+	+	+	+	+	+	+	+	**PA**
40	+	+	+	+	+	+	+	28.1	-	+	+	+	+	+	+	+	+	**PA**
41	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	**ND**
47	+	+	+	+	+	+	+	32.8	-	+	+	+	+	+	+	+	+	**PA**

Laboratory **E**
Lactic acid bacteria: 1.3 x 10^7 CFU/g

DNA extraction: foodproof® StarPrep Three Kit
Thermocycler: Lightcycler480

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*				
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
4	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
7	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
8	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
16	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
21	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
24	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
2	-	+	-	-	-	-	-	/	+	-	-	-	-	-	/	-	-	NA
3	-	+	-	-	-	-	-	/	+	-	-	-	-	-	/	-	-	NA
6	-	+	-	-	-	-	-	/	+	-	-	-	-	-	/	-	-	NA
10	-	+	-	-	-	-	-	/	-	-	-	+	-	-	-	-	-	NA
14	+	+	+	+	+	+	-	/	-	-	-	+	-	-	-	-	-	ND
15	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
19	-	+	-	-	-	-	+	25.98	-	+	+	+	+	+	+	+	+	PD
23	+	+	+	+	+	+	-	/	-	-	-	+	-	-	-	-	-	ND
5	-	+	-	-	-	-	+	26.83	+	+	+	+	+	+	+	+	+	PD
9	+	+	+	+	+	+	+	22.61	-	+	+	+	+	+	+	+	+	PA
11	-	+	-	-	-	-	+	20.96	-	+	+	+	+	+	+	+	+	PD
12	+	+	+	+	+	+	+	22.80	-	+	+	+	+	+	+	+	+	PA
17	+	+	+	+	+	+	+	24.98	+	+	+	+	+	+	+	+	+	PA
18	+	+	+	+	+	+	+	22.99	-	+	+	+	+	+	+	+	+	PA
20	+	+	+	+	+	+	+	23.95	+	+	+	+	+	+	+	+	+	PA
22	+	+	+	+	+	+	+	22.80	-	+	+	+	+	+	+	+	+	PA

Laboratory **F**
Lactic acid bacteria: 1.09 x 10^7 CFU/g

DNA extraction: foodproof® StarPrep Three Kit
Thermocycler: Lightcycler480

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*				
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
4	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
7	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
8	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
16	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
21	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
24	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
2	-	-	-	-	/	-	+	25.84	+	+	+	+	+	+	+	+	+	PD
3	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
6	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
10	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
14	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
15	-	-	-	-	/	-	+	32.94	+	+	+	+	+	+	+	+	+	PD
19	-	-	-	-	/	-	+	37.77	+	+	+	+	+	+	+	+	+	PD
23	+	+	+	+	+	+	+	29.85	+	+	+	+	+	+	+	+	+	PA
5	-	-	-	-	/	-	+	22.30	+	+	+	+	+	+	+	+	+	PD
9	+	+	+	+	+	+	+	31.61	+	+	+	+	+	+	+	+	+	PA
11	+	+	+	+	+	+	+	23.29	+	+	+	+	+	+	+	+	+	PA
12	+	+	+	+	+	+	+	23.82	+	+	+	+	+	+	+	+	+	PA
17	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
18	+	+	+	+	+	+	+	23.20	+	+	+	+	+	+	+	+	+	PA
20	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
22	+	+	+	+	+	+	+	21.66	+	+	+	+	+	+	+	+	+	PA

Laboratory **G**
Lactic acid bacteria: 1.7 x 10^7 CFU/g

DNA extraction:	BAX lysis
Thermocycler:	BAX Q7

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*			*Salmonella* spp. (FAM)		Internal control (ROX)		RVS		MKTTn					
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*	Latex test			
											Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
4	-	-	-	-	/	-	+	46.8	+	+	-	-	-	-	/	-	-	$PD_{FP(alt)}$
7	-	-	-	-	/	-	-	/	+	-	+	+	+	+	+	+	-	$NA_{FN(alt)}$
8	-	-	-	-	/	-	-	/	+	-	+	+	+	+	+	+	-	$NA_{FN(alt)}$
13	-	-	-	-	/	-	+	42.4	+	+	+	+	+	+	+	+	+	PD
16	-	-	-	-	/	-	-	/	+	-	+	+	+	+	+	+	-	$NA_{FN(alt)}$
21	-	-	+	+	+	+	+	40.5	+	+	+	+	+	+	+	+	+	PA
24	-	-	-	-	/	-	+	46.2	+	+	+	+	+	+	+	+	+	PD
2	-	-	-	-	/	-	+	22.6	-	+	+	+	+	+	+	+	+	PD
3	+	+	+	+	+	+	+	45.7	-	+	+	+	+	+	+	+	+	PA
6	-	+	-	+	-	-	+	34.7	+	+	+	+	+	+	+	+	+	PD
10	+	+	+	+	+	+	+	30.1	+	+	+	+	+	+	+	+	+	PA
14	-	-	-	-	/	-	+	21.9	+	+	+	+	+	+	+	+	+	PD
15	-	-	-	-	/	-	-	/	-	-	+	+	+	+	+	+	-	$NA_{FN(alt)}$
19	-	+	-	+	-	-	-	/	-	-	-	-	+	+	+	+	-	$NA_{FN(alt)}$
23	-	-	-	-	/	-	+	41.6	+	+	+	+	+	+	+	+	+	PD
5	+	+	+	+	+	+	+	21.5	-	+	+	+	+	+	+	+	+	PA
9	+	+	+	+	+	+	+	23.0	-	+	+	+	+	+	+	+	+	PA
11	+	+	+	+	+	+	+	45.8	-	+	-	-	+	+	+	+	+	PA
12	+	+	+	+	+	+	+	22.9	-	+	+	+	+	+	+	+	+	PA
17	+	+	+	+	+	+	+	22.3	-	+	+	+	+	+	+	+	+	PA
18	+	+	+	+	+	+	+	22.5	-	+	+	+	+	+	+	+	+	PA
20	+	+	+	+	+	+	+	23.1	-	+	+	+	+	+	+	+	+	PA
22	+	+	+	+	+	+	+	22.1	-	+	+	+	+	+	+	+	+	PA

Laboratory **H**
Lactic acid bacteria: 1.0 x 10^7 CFU/g

DNA extraction: foodproof® StarPrep Three Kit
Thermocycler: Lightcycler480

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*				
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	-	-	-	/	+	-	+	+	-	-	+	+	-	NA$_{FN(alt)}$
4	-	-	-	-	-	-	-	/	+	-	+	+	-	-	+	+	-	NA$_{FN(alt)}$
7	-	-	-	-	-	-	-	/	+	-	+	+	+	+	+	+	-	NA$_{FN(alt)}$
8	-	-	-	-	-	-	-	/	+	-	+	+	-	-	+	+	-	NA$_{FN(alt)}$
13	-	-	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
16	-	-	-	-	-	-	-	/	+	-	-	+	-	-	-	-	-	NA
21	-	-	-	-	-	-	-	/	+	-	+	+	-	-	+	+	-	NA$_{FN(alt)}$
24	-	-	-	-	-	-	-	/	+	-	+	+	-	-	+	+	-	NA$_{FN(alt)}$
2	-	-	-	-	-	-	-	/	-	-	+	+	-	+	+	+	-	NA$_{FN(alt)}$
3	+	+	+	+	+	+	+	20.98	+	+	+	+	+	+	+	+	+	PA
6	+	+	-	+	+	+	-	/	-	-	+	+	-	+	+	+	-	ND$_{FN(alt)}$
10	+	+	+	+	+	+	-	/	+	-	+	+	-	-	+	+	-	ND$_{FN(alt)}$
14	-	+	-	+	-	-	-	/	-	-	-	+	-	+	-	-	-	NA
15	+	+	+	+	+	+	-	/	-	-	-	+	-	+	-	-	-	ND
19	-	-	-	-	-	-	-	/	+	-	+	+	-	+	+	+	-	NA$_{FN(alt)}$
23	+	+	+	+	+	+	-	/	-	-	-	+	-	+	+	+	-	ND$_{FN(alt)}$
5	+	+	+	+	+	+	+	20.08	-	+	+	+	+	+	+	+	+	PA
9	+	+	+	+	+	+	-	/	-	-	+	+	-	+	+	+	-	ND$_{FN(alt)}$
11	+	+	+	+	+	+	+	18.54	-	+	+	+	+	+	+	+	+	PA
12	+	+	+	+	+	+	+	18.44	-	+	+	+	+	+	+	+	+	PA
17	+	+	+	+	+	+	+	17.19	-	+	+	+	+	+	+	+	+	PA
18	+	+	+	+	+	+	+	18.06	-	+	+	+	+	+	+	+	+	PA
20	+	+	+	+	+	+	+	17.12	-	+	+	+	+	+	+	+	+	PA
22	+	+	+	+	+	+	+	18.63	-	+	+	+	+	+	+	+	+	PA

Laboratory I
Lactic acid bacteria: 1.34 x 10^7 CFU/g

DNA extraction: foodproof® StarPrep Three Kit
Thermocycler: Lightcycler480

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*				
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
4	-	-	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
7	-	-	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
8	-	-	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
13	-	-	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
16	-	-	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
21	-	-	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
24	-	-	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
2	-	+	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
3	+	+	+	+	+	+	-	/	-	-	-	+	-	+	-	-	-	ND
6	+	+	+	+	+	+	+	23.92	-	+	+	+	+	+	+	+	+	PA
10	-	+	-	+	-	-	-	/	-	-	-	+	-	-	-	-	-	NA
14	-	+	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
15	-	+	-	-	-	-	-	/	-	-	-	+	-	-	-	-	-	NA
19	-	-	-	-	-	-	+	26.01	+	+	+	+	+	+	+	+	+	PD
23	+	+	+	+	+	+	+	22.91	-	+	+	+	+	+	+	+	+	PA
5	+	+	+	+	+	+	+	19.80	-	+	+	+	+	+	+	+	+	PA
9	+	+	+	+	+	+	+	21.30	-	+	+	+	+	+	+	+	+	PA
11	+	+	+	+	+	+	+	22.20	-	+	+	+	+	+	+	+	+	PA
12	+	+	+	+	+	+	+	20.89	-	+	+	+	+	+	+	+	+	PA
17	+	+	+	+	+	+	+	20.36	-	+	+	+	+	+	+	+	+	PA
18	-	+	-	-	-	-	+	20.54	-	+	+	+	+	+	+	+	+	PD
20	-	+	-	-	-	-	+	22.89	-	+	+	+	+	+	+	+	+	PD
22	+	+	+	+	+	+	+	23.34	-	+	+	+	+	+	+	+	+	PA

Laboratory **J1**
Lactic acid bacteria: 4.8 x 10^5 CFU/g

DNA extraction: foodproof® StarPrep Three Kit
Thermocycler: BAX Q7

[1]Retest PCR

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*				
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	/	-	-	/	+	-	-	-	-	-	-	-	-	NA
4	-	-	-	-	/	-	-	/	+	-	-	-	-	-	-	-	-	NA
7	-	-	-	-	/	-	-	/	+	-	-	-	-	-	-	-	-	NA
8	-	-	-	-	/	-	-	/	+	-	-	-	-	-	-	-	-	NA
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	-	-	-	NA
16	-	-	-	-	/	-	-	/	+	-	-	-	-	-	-	-	-	NA
21	-	-	-	-	/	-	-	/	+	-	-	-	-	-	-	-	-	NA
24	-	-	-	-	/	-	-/-/-	/	+	-	-	-	-	-	-	-	-	NA
2	-	-	-	-	/	-	+	31.4	+	+	+	+	+	+	+	+	+	PD
3	-	-	-	-	/	-	+	23.3	+	+	-	-	+	+	+	+	+	PD
6	-	-	-	-	/	-	-	/	+	-	-	-	-	-	-	-	-	NA
10	+	+	+	+	+	+	-	/	-	-	-	-	-	-	-	-	-	ND
14	-	d	-	-	-	-	+	23.0	-	+	+	+	-	-	+	+	+	PD
15	-	d	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
19	-	-	-	-	/	-	-	/	-	-	-	-	-	-	-	-	-	NA
23	-	d	-	-	-	-	-	/	+	-	-	-	-	-	-	-	-	NA
5	-	d	-	-	-	-	+	19.6	-	+	+	+	-	-	+	+	+	PD
9	+	+	+	+	+	+	-	/	-	-	-	-	-	-	-	-	-	ND
11	+	+	+	+	+	+	+/+	32.1/24.7	+	+	-	+	+	+	+	+	+	PA
12	-	-	-	-	/	-	-	/	-	-	-	-	-	-	-	-	-	NA
17	-	-	-	d	-	-	-	/	-	-	-	-	-	-	-	-	-	NA
18	+	+	+	+	+	+	+	22.2	-	+	+	+	-	-	+	+	+	PA
20	+	+	+	+	+	+	+	23.2	-	+	+	+	+	+	+	+	+	PA
22	+	+	+	+	+	+	+/-[1]/-[1]	45.8	-	+	-	-	-	-	-	-	-	$PA_{FP(alt)}$

Laboratory **J2**
Lactic acid bacteria: 4.7 x 10^5 CFU/g

DNA extraction: foodproof® StarPrep Three Kit
Thermocycler: BAX Q7

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*			*Salmonella* spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		XLD Typical colonies (+/-)	*Brilliance Salmonella* Typical colonies (+/-)	XLD Typical colonies (+/-)	*Brilliance Salmonella* Typical colonies (+/-)				
27	-	-	-	-	/	-	+	41.9	+	+	-	-	-	-	/	-	-	**$PD_{FP(alt)}$**
29	-	-	-	-	/	-	+	38.1	+	+	-	-	-	-	/	-	-	**$PD_{FP(alt)}$**
30	-	-	-	-	/	-	+	44.1	+	+	-	-	-	-	/	-	-	**$PD_{FP(alt)}$**
36	-	-	-	-	/	-	+	44.5	+	+	-	-	-	-	/	-	-	**$PD_{FP(alt)}$**
37	-	-	-	-	/	-	+	35.5	-	+	-	-	-	-	/	-	-	**$PD_{FP(alt)}$**
42	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
44	-	-	-	-	/	-	+	41.8	+	+	-	-	-	-	/	-	-	**$PD_{FP(alt)}$**
48	-	-	-	-	/	-	+	37.9	+	+	-	-	-	-	/	-	-	**$PD_{FP(alt)}$**
28	-	-	-	-	/	-	+	47.4	-	+	-	-	-	-	/	-	-	**$PD_{FP(alt)}$**
32	-	-	-	-	/	-	+	39.9	+	+	+	-	-	-	+	+	+	**PD**
33	-	-	-	-	/	-	+	25.6	-	+	-	+	+	-	+	+	+	**PD**
34	-	-	-	-	/	-	+	47.2	-	+	-	+	-	-	+	+	+	**PD**
38	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	**ND**
43	-	-	-	-	/	-	+	46.2	-	+	-	-	-	-	/	-	-	**$PD_{FP(alt)}$**
45	+	+	+	+	+	+	+	35.5	+	+	+	+	-	+	+	+	+	**PA**
46	-	-	-	-	/	-	+	40.9	+	+	-	-	-	-	/	-	-	**NA**
25	+	+	+	+	+	+	+	30.1	-	+	-	-	-	-	/	-	-	**$PA_{FP(alt)}$**
26	+	+	+	+	+	+	+	36.6	-	+	+	+	-	+	+	+	+	**PA**
31	+	+	-	+	+	+	+	28.4	-	+	+	+	+	+	+	+	+	**PA**
35	+	+	-	+	+	+	+	28.3	-	+	+	+	+	+	+	+	+	**PA**
39	-	-	-	-	/	-	+	19.3	-	+	+	+	+	+	+	+	+	**PD**
40	+	+	+	+	+	+	+	23.1	-	+	+	+	+	+	+	+	+	**PA**
41	+	+	+	+	+	+	+	31.5	+	+	+	+	+	+	+	+	+	**PA**
47	-	+	+	+	+	+	+	36.0	-	+	+	+	+	+	+	+	+	**PA**

Laboratory **K**
Lactic acid bacteria: 1.2 x 10^7 CFU/g

DNA extraction:	foodproof® StarPrep Three Kit
Thermocycler:	BAX Q7

Inh = PCR-Inhibition; * = Repetition with 1:5 dilution

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*				
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
4	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
7	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
8	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
16	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
21	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
24	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
2	-	-	-	-	/	-	-	/	-	-	-	-	-	-	/	-	-	**NA**
3	+	+	+	+	+	+	+	26.5	-	+	+	+	+	+	+	+	+	**PA**
6	-	-	-	-	/	-	+	26.4	-	+	+	+	+	+	+	+	+	**PD**
10	+	+	+	+	+	+	+	25.3	-	+	+	+	+	+	+	+	+	**PA**
14	-	-	-	-	/	-	+	21.2	-	+	+	+	+	+	+	+	+	**PD**
15	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	**NA**
19	+	+	+	+	+	+	+	27.3	-	+	+	+	+	+	+	+	+	**PA**
23	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	**ND**
5	-	-	-	-	/	-	+	23.9	-	+	+	+	+	+	+	+	+	**PD**
9	+	+	+	+	+	+	+	30.0	-	+	+	+	+	+	+	+	+	**PA**
11	+	+	+	+	+	+	+	26.0	-	+	+	+	+	+	+	+	+	**PA**
12	+	+	+	+	+	+	Inh/+	0/22.8*	Inh/-	i/+*	+	+	+	+	+	+	+	**PA**
17	+	+	+	+	+	+	+	24.0	-	+	+	+	+	+	+	+	+	**PA**
18	+	+	+	+	+	+	+	24.9	-	+	+	+	+	+	+	+	+	**PA**
20	+	+	+	+	+	+	+	26.0	-	+	+	+	+	+	+	+	+	**PA**
22	-	-	-	-	/	-	+	24.6	-	+	+	+	+	+	+	+	+	**PD**

Laboratory **L**
Lactic acid bacteria: 9.2 x 10^6 CFU/g

DNA extraction:	BAX lysis
Thermocycler:	Lightcycler480

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*				
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
4	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
7	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
8	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
16	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
21	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
24	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
2	-	-	-	-	/	-	+	21.66	+	+	+	+	+	+	+	+	+	PD
3	-	-	-	-	/	-	+	26.18	+	+	+	+	+	+	+	+	+	PD
6	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	ND
10	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
14	-	-	-	-	/	-	+	21.62	+	+	+	+	+	+	+	+	+	PD
15	-	-	-	-	/	-	-	/	-	-	-	-	-	-	/	-	-	NA
19	-	-	-	-	/	-	+	20.53	-	+	+	+	+	+	+	+	+	PD
23	-	-	-	-	/	-	+	22.5	+	+	+	+	+	+	+	+	+	PD
5	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
9	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
11	+	+	+	+	+	+	+	20.53	+	+	+	+	+	+	+	+	+	PA
12	+	+	+	+	+	+	+	20.69	+	+	+	+	+	+	+	+	+	PA
17	+	+	+	+	+	+	+	20.22	-	+	+	+	+	+	+	+	+	PA
18	+	+	+	+	+	+	+	20.34	-	+	+	+	+	+	+	+	+	PA
20	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	ND
22	+	+	+	+	+	+	+	22.05	-	+	+	+	+	+	+	+	+	PA

Laboratory **M**
Lactic acid bacteria: 1.04 x 10^7 CFU/g

DNA extraction: BAX lysis
Thermocycler: Lightcycler480

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit												Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation								
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*			*Salmonella* spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test	Confirmation final result *Salmonella* spp.	Final result	
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		XLD Typical colonies (+/-)	*Brilliance Salmonella* Typical colonies (+/-)	XLD Typical colonies (+/-)	*Brilliance Salmonella* Typical colonies (+/-)				
1	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
4	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
7	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
8	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
16	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
21	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
24	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
2	-	-	-	-	/	-	+	19.85	+	+	+	+	+	+	+	+	+	PD
3	-	-	-	-	/	-	+	23.52	+	+	+	+	+	+	+	+	+	PD
6	-	-	-	-	/	-	+	19.05	-	+	+	+	+	+	+	+	+	PD
10	-	-	-	-	/	-	+	19.37	+	+	+	+	+	+	+	+	+	PD
14	-	-	-	-	/	-	-	/	-	-	-	-	-	-	/	-	-	NA
15	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
19	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
23	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	ND
5	+	+	+	+	+	+	+	20.07	-	+	+	+	+	+	+	+	+	PA
9	+	+	+	+	+	+	+	19.38	-	+	+	+	+	+	+	+	+	PA
11	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	ND
12	+	+	+	+	+	+	+	20.13	+	+	+	+	+	+	+	+	+	PA
17	-	-	-	-	/	-	+	18.54	+	+	+	+	+	+	+	+	+	PD
18	+	+	+	+	+	+	+	18.96	+	+	+	+	+	+	+	+	+	PA
20	+	+	+	+	+	+	-	/	-	-	-	-	-	-	/	-	-	ND
22	+	+	+	+	+	+	+	20.59	-	+	+	+	+	+	+	+	+	PA

Laboratory **N**
Lactic acid bacteria: 9.0 x 10^6 CFU/g

DNA extraction:	BAX lysis
Thermocycler:	BAX Q7

N°Sample	ISO 6579-1						foodproof® Salmonella plus Cronobacter Detection LyoKit											Agreement Ref/Alt
	RVS		MKTTn		Latex test	Final result	PCR test			PCR final result *Salmonella* spp.	Confirmation					Confirmation final result *Salmonella* spp.	Final result	
							Salmonella spp. (FAM)		Internal control (ROX)		RVS		MKTTn		Latex test			
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*							XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*				
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)			Results (+/-)	Cq value	Result or Cq value		Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)				
1	-	-	-	-	/	-	+	46.8	+	+	-	-	-	-	/	-	-	$PD_{FP(alt)}$
4	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
7	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
8	-	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
13	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
16	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
21	+	+	+	+	+	+	+	42.6	+	+	-	-	-	-	/	-	-	$PA_{FP(alt)}$
24	-	-	-	-	/	-	-	/	+	-	-	-	-	-	/	-	-	NA
2	+	+	+	+	+	+	+	22.6	-	+	+	+	+	+	+	+	+	PA
3	+	+	+	+	+	+	-	/	-	-	-	+	-	+	+	+	-	$ND_{FN(alt)}$
6	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
10	+	+	+	+	+	+	+	22.6	-	+	+	+	+	+	+	+	+	PA
14	+	+	+	+	+	+	+	24.0	-	+	+	+	+	+	+	+	+	PA
15	+	+	+	+	+	+	-	/	-	-	-	+	-	-	/	-	-	ND
19	-	-	-	+	/	-	-	/	-	-	-	+	-	-	/	-	-	NA
23	+	+	+	+	+	+	-	/	+	-	-	-	-	-	/	-	-	ND
5	-	-	-	+	/	-	+	31.3	-	+	+	+	+	+	-	-	-	$PD_{FP(alt)}$
9	+	+	+	+	+	+	+	23.3	-	+	+	+	+	+	+	+	+	PA
11	+	+	+	+	+	+	+	23.5	+	+	+	+	+	+	+	+	+	PA
12	+	+	+	+	+	+	+	22.7	-	+	+	+	+	+	+	+	+	PA
17	+	+	+	+	+	+	+	42.1	-	+	+	+	+	+	+	+	+	PA
18	+	+	+	+	+	+	+	25.2	-	+	+	+	+	+	+	+	+	PA
20	+	+	+	+	+	+	+	23.5	-	+	+	+	+	+	+	+	+	PA
22	+	+	+	+	+	+	+	23.5	-	+	+	+	+	+	+	+	+	PA

Laboratory **O** ADRIA
Lactic acid bacteria: 7.7 x 10^6 CFU/g

N° Sample	ISO 6579-1♦						foodproof® Salmonella plus Cronobacter Detection LyoKit																		Agreement Ref/Alt			
							DNA EXTRACTION : BAX lysis						DNA EXTRACTION : StarPrep Three kit						Confirmation					Final result					
							Thermocycler: BAX Q7				Thermocycler: LC 480 II		Thermocycler: BAX Q7				Thermocycler: LC 480 II											
	RVS		MKTTn				PCR test				PCR test		PCR test				PCR test		RVS		MKTTn							
	XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*			*Salmonella* spp. (FAM)		Internal control (ROX)		*Salmonella* spp. (FAM)		Internal control (ROX)		*Salmonella* spp. (FAM)		Internal control (ROX)		XLD	*Brilliance Salmonella*	XLD	*Brilliance Salmonella*		DNA EXTRACTION: BAX Lysis		DNA EXTRACTION: StarPrep Three kit		DNA EXTRACTION: BAX Lysis		DNA EXTRACTION: StarPrep Three kit	
	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Latex test	Final result	Results (+/-)	Cq value	Result or Cq value	PCR final result *Salmonella* spp.	Results (+/-)	Cq value	Result or Cq value	PCR final result *Salmonella* spp.	Results (+/-)	Cq value	Result or Cq value	PCR final result *Salmonella* spp.	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Typical colonies (+/-)	Latex test	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II	BAX Q7	LC 480 II
1	-	-	-	-	/	-	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	NA	NA	NA	NA
4	-	-	-	-	/	-	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	NA	NA	NA	NA
7	-	-	-	-	/	-	-	/	-	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	NA	NA	NA	NA
8	-	-	-	-	/	-	-	/	-	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	NA	NA	NA	NA
13	-	-	-	-	/	-	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	NA	NA	NA	NA
16	-	-	-	-	/	-	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	NA	NA	NA	NA
21	-	-	-	-	/	-	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	NA	NA	NA	NA
24	-	-	-	-	/	-	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	NA	NA	NA	NA
2	-	-	-	-	/	-	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	NA	NA	NA	NA
3	+	+	+	+	+	+	+	30.0	-	+	+	27.09	-	+	+	27.7	-	+	+	23.74	-	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA
6	-	-	-	-	/	-	+	28.3	-	+	+	24.03	-	+	+	23.0	-	+	+	19.67	-	+	+	+	+	+	+	+	+	+	+	PD	PD	PD	PD
10	-	-	-	-	/	-	-	/	-	-	-	/	-	-	-	/	-	-	-	/	-	-	-	-	-	-	-	NA	NA	NA	NA
14	-	-	-	-	/	-	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	NA	NA	NA	NA
15	+	+	+	+	+	+	-	/	+	-	-	/	-	-	-	/	-	-	-	/	-	-	-	-	-	-	-	ND	ND	ND	ND
19	+	+	+	+	+	+	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	ND	ND	ND	ND
23	+	+	+	+	+	+	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	ND	ND	ND	ND
5	+	+	+	+	+	+	-/-	/	-	-	-	/	-	-	-	/	-	-	-	/	-	-	+	+	+	+	+	-	-	-	-	ND	ND	ND	ND
9	+	+	+	+	+	+	+	25.1	-	+	+	21.30	-	+	+	22.1	-	+	+	18.81	-	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA
11	+	+	+	+	+	+	+	27.1	-	+	+	21.99	-	+	+	23.7	-	+	+	20.00	-	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA
12	+	+	+	+	+	+	+	28.0	+	+	+	23.70	+	+	+	23.5	-	+	+	20.65	+	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA
17	+	+	+	+	+	+	+	25.7	-	+	+	21.50	-	+	+	22.1	-	+	+	18.61	-	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA
18	+	+	+	+	+	+	+	23.8	-	+	+	20.04	-	+	+	21.0	-	+	+	17.80	-	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA
20	+	+	+	+	+	+	+	23.8	-	+	+	20.10	-	+	+	22.2	-	+	+	17.36	-	+	+	+	+	+	+	+	+	+	+	PA	PA	PA	PA
22	+	+	+	+	+	+	-	/	+	-	-	/	+	-	-	/	+	-	-	/	+	-	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND

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