



CERTIFICATION

AOAC Research Institute *Performance Tested Methods*SM

Certificate No.
082501

The AOAC Research Institute hereby certifies the method known as

EZ-Check *Salmonella* spp. Kit

Corporate Location

**Bio-Rad Laboratories
2000 Alfred Nobel Drive
Hercules, CA 94547 USA**

Manufacturing Location

**Bio-Rad Laboratories
925 Alfred Nobel Drive
Hercules, CA 94547 USA**

This method has been evaluated and certified according to the policies and procedures of the AOAC *Performance Tested Methods*SM Program. This certificate indicates an AOAC Research Institute Certification Mark License Agreement has been executed which authorizes the manufacturer to display the AOAC Research Institute *Performance Tested Methods*SM certification mark on the above-mentioned method for the period below. Renewal may be granted by the Expiration Date under the rules stated in the licensing agreement.

A handwritten signature in black ink, appearing to read "Bradley A. Stawick".

Bradley A. Stawick, AOAC Research Institute Senior Director

Issue Date

April 21, 2026

Expiration Date

December 31, 2025

METHOD NAME

EZ-Check *Salmonella* spp. Kit

CATALOG NUMBER

12018082

ORIGINAL CERTIFICATION DATE

August 13, 2025

PRINCIPLE OF THE METHOD

The EZ-Check *Salmonella* spp. Kit is a simple and rapid qualitative test allowing for the detection of DNA sequences specific to *Salmonella* spp. found in food products, animal feed, and environmental samples. Using real-time PCR, *Salmonella* spp.-specific DNA sequences are amplified and detected simultaneously by means of fluorescent probes. The EZ-Check *Salmonella* spp. Kit is based on gene amplification and detection by real-time PCR. The kit's ready-to-use lyophilized PCR reagents contain oligonucleotides (primers and probes) specific to *Salmonella* spp., as well as DNA polymerase and nucleotides. Detection and data analysis are optimized for use with a Bio-Rad real-time PCR instrument, such as the CFX Opus 96, CFX Opus Deepwell and CFX96 Touch Deep Well Real-Time PCR Detection Systems.

CERTIFIED CLAIM STATEMENT: The EZ-Check *Salmonella* spp. Kit is certified for the detection of *Salmonella* spp. within the scope of Tables 1 and 2.

Certified method includes:

1. Real-Time PCR Systems: CFX Opus 96, CFX Opus Deepwell, or CFX96 Touch Deep Well Real-Time PCR Systems
2. Optional iQ-Check Prep System for automated DNA extraction and PCR plate setup
3. With and without Free DNA Removal Solution
4. Optional alternative confirmation protocol with a direct streak from the primary enrichment to RAPID[®] *Salmonella* agar

Table 1. Method Performance Claims

Matrix	Test Portion	Enrichment Conditions				Reference Method ^b	Claim ^c
		Broth ^a	Volume	Temperature	Time		
Raw beef trim sampling cloth	1 cloth ^d	pw BPW	200 mL	42 ± 1°C	8-22 h	MLG 4.14	NSDD
	1 cloth	mTSB	200 mL	42 ± 1°C	15-24 h	MLG 4.14	Eq
Raw ground beef	375 g	pw BPW	1125 mL	42 ± 1°C	8-22 h	MLG 4.14	NSDD
	325 g	mTSB	975 mL	42 ± 1°C	15-22 h	MLG 4.14	Eq
Raw ground turkey	375 g	pw BPW	1125 mL	37 ± 1°C	8-22 h	MLG 4.14	NSDD
	325 g	BPW	1625 mL	35 ± 2°C	20-24 h	MLG 4.14	Eq
Raw chicken breast	375 g	pw BPW	1125 mL	37 ± 1°C	8-22 h	MLG 4.14	NSDD
	325 g	BPW	1625 mL	35 ± 2°C	20-24 h	MLG 4.14	Eq
Chicken carcass rinse ^e	30 mL	pw BPW	30 mL	37 ± 1°C	18-22 h	MLG 4.14	NSDD
	30 mL	BPW	30 mL	35 ± 2°C	20-24 h	MLG 4.14	Eq
Raw ground pork	375 g	pw BPW	1125 mL	42 ± 1°C	8-22 h	MLG 4.14	NSDD
	325 g	mTSB	975 mL	42 ± 1°C	15-22 h	MLG 4.14	Eq

Nonfat dry milk	375 g	BPW + PIF	1125 mL	37 ± 1°C	18-26 h	BAM Ch. 5	NSDD
Whey protein powder	375 g	BPW + PIF	1125 mL	37 ± 1°C	18-26 h	BAM Ch. 5	NSDD
Infant formula w/probiotics	375 g	BPW + PIF	1125 mL	37 ± 1°C	18-26 h	BAM Ch. 5	NSDD
All-purpose flour	375 g	BPW + PIF	1125 mL	37 ± 1°C	18-26 h	BAM Ch. 5	NSDD
Cheddar cheese	375 g	BPW	1125 mL	37 ± 1°C	18-22 h	BAM Ch. 5	NSDD
Romaine lettuce	375 g	pw BPW	1125 mL	42 ± 1°C	10-24 h	BAM Ch. 5	NSDD
Frozen vegetable blend	375 g	pw BPW	1125 mL	37 ± 1°C	18-22 h	BAM Ch. 5	NSDD
Fresh cut cantaloupe	375 g	pw BPW	1125 mL	37 ± 1°C	18-22 h	BAM Ch. 5	NSDD
Cocoa powder	375 g	BPW	1125 mL	37 ± 1°C	18-22 h	BAM Ch. 5	NSDD
Creamy peanut butter	375 g	pw BPW	1125 mL	42 ± 1°C	18-24 h	BAM Ch. 5	NSDD
Dry dog food	375 g	BPW	1125 mL	37 ± 1°C	18-26 h	BAM Ch. 5	NSDD
Garlic powder	375 g	BPW + 0.5% K ₂ SO ₃	3000 mL	37 ± 1°C	18-24 h	BAM Ch. 5	NSDD
Bean sprouts	375 g	pw BPW	1125 mL	37 ± 1°C	18-22 h	BAM Ch. 5	NSDD
Deli salad	25 g	BPW	225 mL	37 ± 1°C	18-26 h	ISO 6579-1:2017	Eq
Rubber	1"x1", swab ^f	BPW	10 mL	37 ± 1°C	18-24 h	BAM Ch. 5	NSDD
Sealed concrete	4"x4", sponge ^f	BPW	60 mL	37 ± 1°C	18-24 h	BAM Ch. 5	NSDD
Stainless steel	4"x4", sponge ^f	BPW	60 mL	37 ± 1°C	18-24 h	BAM Ch. 5	NSDD

^a pw=prewarmed; BPW = Buffered Peptone Water; mTSB = modified Tryptic Soy Broth; BPW + PIF = Buffered Peptone Water + PIF supplement

^b MLG = Microbiology Laboratory Guidebook, BAM=Bacteriological Analytical Manual; ISO = International Organization for Standardization

^c NSDD = No statistical difference detected using SLV study design from OMA Appendix J (2012). The SLV qualitative method comparison study design from OMA Appendix J (2012) is not intended to demonstrate statistical equivalence. Expert opinion is that the method is appropriate for its intended use. Eq = The study data indicate with 95% confidence that the candidate presumptive results are equivalent to the candidate confirmation results. Equivalency criteria are dependent on the observed POD value and are determined according to TR364 (Least Cost Formulations, Virginia Beach, VA).

^d Sampling cloth is premoistened with 25 mL cold neutralizing BPW.

^e Add 400 mL BPW to cavity of the carcass.

^f Swabs/sponges are premoistened in 10 mL Hi-Cap Neutralizing Broth.

Table 2. Method Selectivity

Broth ^a	Temperature	Inclusivity Strains		Exclusivity Strains	
		No. Tested	No. Positive	No. Tested	No. Positive
BPW	42 ± 1°C	100 ^b	100	30 ^c	0

^a BPW = Buffered Peptone Water

^b Comprising *Salmonella bongori* and *Salmonella enterica* including subsps. *arizonae*, *diarizonae*, *indica*, *houtenae*, *salamae*, and *enterica*

^c Comprising 29 species

Table 3. Method History

No.	Date	Summary	Supporting Data
-----	------	---------	-----------------

1	August 2025	Original certification	Certification Report
---	-------------	------------------------	----------------------