



Laboratory Proficiency Testing Program

M05
Meat Microbiology 3 Program
L.monocytogenes

09-08-2025 (Shipment Date)

10-08-2025 (Final Report Issue Date)

Round ID: M05-090825



CERT # 1782.01

Proficiency Testing Provider

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Table of Contents

1.0 Introduction

2.0 Preparation of Test Material

3.0 Analyses Requested

4.0 Results

4.1 Comments and Recommendations

Appendix A- Participating Laboratory's Results

Appendix B- Instructions for Analysis

Appendix C- Homogeneity Report

Appendix D- Inoculation Scheme

Appendix E - Stability Report

Report Authorization

This report has been authorized by Shane Flynn, Senior Director of the AOAC laboratory Proficiency Testing Program.

Shane P Flynn

**REPORT TO PARTICIPANTS IN
THE AOAC® LABORATORY PROFICIENCY TESTING PROGRAM**

**MEAT MICROBIOLOGY 3 PROGRAM
*L. monocytogenes***

1.0 Introduction

Test materials for the Meat Microbiology 3 Program (*Listeria*) were shipped to participants on September 8, 2025. Each laboratory was given a site identification number to maintain confidentiality. Participants were encouraged to analyze the samples on September 9, 2025 and urged to initiate analyses by Monday, September 15, 2025. The instruction packet on how to use the confidential online data submission system was posted online. The participants were to submit an electronic response online to verify the condition of the test materials upon receipt and confirm the safe handling of the test materials containing *Listeria* by participants. Participants were instructed to analyze the test materials according to procedures routinely used in their laboratories. The results were to be submitted to AOAC by September 23, 2025.

2.0 Preparation of Test Materials

Each set of test materials included twelve samples, each containing approximately 25 grams of frozen ground or processed meat. All samples were for qualitative testing. The matrix was screened prior to spiking. Each sample was individually inoculated. Three duplicate samples were selected to verify the presence or absence of *Listeria monocytogenes*. For the inoculation scheme, nine samples were individually inoculated with approximately 276 cells/gram of organisms. Six samples were inoculated with *Listeria monocytogenes*, three samples were inoculated with *L. innocua* and three samples were uninoculated. Homogeneity is Appendix C, inoculation scheme is Appendix D and stability is Appendix E.

Samples were prepared by the following laboratory:

Mérieux NutriSciences
Silliker® Food Science Center
3600 Eagles Nest Drive, Bldg. A
Crete, IL 60417

3.0 Analyses Requested

Samples 1-12	<i>L. monocytogenes</i>	Indicate Present /Absent
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Information on the method used for each analyses was requested.

4.0 Results

Confidentiality of results will be maintained by issuing site identification codes to the participants. Results in reports will only be identified by the site identification code. Results of participants were compared to the expected results. There was inadequate information about the methodology used to group the results according to method for this shipment.

For laboratories using *Listeria* Genus Only methods/test kits - review the inoculation scheme (Appendix D) to distinguish what samples were positive for a *Listeria* spp. other than *L. monocytogenes*. AOAC will be modifying future reports to provide additional observations for labs using the *Listeria* Genus Only methods/test kits.

If a participant would like to appeal against the assessment of their performance in this proficiency testing scheme please contact staff at LPTP@AOAC.org

4.1 Comments and Recommendations

All participating laboratories performed well. If participants have questions on reporting, please contact PT Staff by sending an email to LPTP@AOAC.org, before officially submitting final results. Once a lab has officially submitted results, no changes can be made.

Individual laboratory results are in Appendix A

Appendix A
Results for (M05) Meat Microbiology 3
Listeria monocytogenes
Shipment on September 8, 2025
Site identification: 190443

09/29/2025 8:22 AM

Sample Number	<i>Listeria monocytogenes</i> Expected Results	Result for Site ID 190443 Presence or Absence of <i>Listeria monocytogenes</i>	Evaluation	Comments from Site ID 190443
1	Present	Present	ACCEPTABLE	
2	Present	Present	ACCEPTABLE	
3	Absent	Absent	ACCEPTABLE	
4	Absent	Absent	ACCEPTABLE	L. innocua
5	Present	Present	ACCEPTABLE	
6	Present	Present	ACCEPTABLE	
7	Absent	Absent	ACCEPTABLE	
8	Absent	Absent	ACCEPTABLE	L. innocua
9	Present	Present	ACCEPTABLE	
10	Present	Present	ACCEPTABLE	
11	Absent	Absent	ACCEPTABLE	
12	Absent	Absent	ACCEPTABLE	L. innocua



Meat Microbiology 3 (M05) PROFICIENCY TESTING PROGRAM

Sample:	Enclosed are twelve samples, each containing 25 grams of processed meat. Shelf-life studies performed on samples stored frozen demonstrated that the samples remained stable for a period of at least 7 days if stored frozen. Please make every effort to analyze samples as soon as possible. Sample should arrive 10°C or below. These samples should be handled and analyzed in the same manner and following the same analytical standard operating procedures (SOPs) as routine samples.
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Ship Date:	0 -0 -2025
Start Analysis by Date:	0 -1 -2025
Result Due Date:	0 -2 -2025

Storage:	Store samples frozen (-20°C) until analysis date.
Thawing:	Thaw when ready to analyze by placing the samples into a plastic bag in cold water for 1 -2 hours. Do not refreeze the samples.

Analyze samples numbered 1 through 12 for the following:

Listeria monocytogenes - Specify the method. Report as PRESENT or ABSENT.
Use the comment section to provide additional information.

Reporting	
Where to Report	https://pt2.aoac.org
How to Report	Step by step instructions for online reporting are available once online account is accessed

Questions and Comments

If you have questions regarding the M05 PT round, please contact LPTP@AOAC.org.

Test Material Provider:

Mérieux NutriSciences
Silliker® Food Science Center
3600 Eagles Nest Drive, Bldg. A
Crete, IL 60417

Appendix C
Homogeneity Results - Qualitative
Meat Microbiology - M05
Ship Date September 8 2025

Results of Homogeneity Testing - *Listeria* spp./25g Sample

	Inoculated in Same Batch	Inoculation Scheme	Results		Species	
			Replicate 1	Replicate 2		
L-1	L-2, L-5, L-6, L-9, L-10	<i>L. monocytogenes</i>	Positive	Positive	<i>L. monocytogenes</i>	Passed
L-2		<i>L. monocytogenes</i>				
L-3	L-7, L-11	Uninoculated	Negative	Negative	NA	Passed
L-4	L-8, L-12	<i>L. innocua</i>	Positive	Positive	<i>L. innocua</i>	Passed

Appendix D
Inoculation Scheme
Meat Microbiology - M05
Ship Date September 8, 2025

	Inoculation Scheme
L-1	<i>L. monocytogenes</i>
L-2	<i>L. monocytogenes</i>
L-3	Uninoculated
L-4	<i>L. innocua</i>
L-5	<i>L. monocytogenes</i>
L-6	<i>L. monocytogenes</i>
L-7	Uninoculated
L-8	<i>L. innocua</i>
L-9	<i>L. monocytogenes</i>
L-10	<i>L. monocytogenes</i>
L-11	Uninoculated
L-12	<i>L. innocua</i>

Appendix E
 Stability Analysis
 Meat Microbiology - M05
 Ship Date: September 8, 2025
 Analysis Date: September 23, 2025

Results of Stability Testing - *Listeria* spp./25g Sample

	Inoculated in Same Batch	Inoculation Scheme	Results		Species	
			Replicate 1	Replicate 2		
L-1	L-2, L-5, L-6, L-9, L-10	<i>L. monocytogenes</i>	Positive	Positive	<i>L. monocytogenes</i>	Passed
L-2		<i>L. monocytogenes</i>				
L-3	L-7, L-11	Uninoculated	Negative	Negative	NA	Passed
L-4	L-8, L-12	<i>L. innocua</i>	Positive	Positive	<i>L. innocua</i>	Passed

NA = Not Applicable