## M05

## **Meat Microbiology Program**

## **L.monocytogenes**

12-03-18 (Shipment Date)

01-14-19 (Report Issue Date)



Proficiency Testing Provider Certificate 1782.01

AOAC INTERNATIONAL
Arlene Fox, Senior Director
2275 Research Blvd. ste 300
Rockville, MD 20850
+1-301-924-7077 LPTP@AOAC.org

### **Table of Contents**

- **1.0** Introduction
- **2.0** Preparation of Test Material
- 3.0 Analyses Requested
- **4.0** Calculations and Interpretation of Z-scores
- **Appendix A-** Participating Laboratory's Results
- **Appendix B-** Instructions for Analysis
- **Appendix C-** Homogeneity Report
- **Appendix D-** Inoculation Report

### Report Authorization

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

Online Fox

## 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 December 3, 2018. Each laboratory was given a site identification number in order to maintain confidentiality. Participants were encouraged to analyze the samples on December 4, 2018 and urged to initiate analyses by Monday, December 10, 2018. 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 also instructed to report results electronically. Participants were instructed to analyze the test materials according to procedures routinely used in their laboratories. Instructions were provided for all dilutions. The results were recorded and were to be submitted to AOAC by December 18, 2018.

## 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 of the 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, six samples were individually inoculated with approximately 276 cells/gram of organisms. Nine samples were inoculated with *Listeria monocytogenes*, three samples were inoculated with *Listeria innocua* and three samples were uninoculated.

Samples were prepared by the following laboratory:

Silliker Solution Center 3600 Eagles Nest Drive, Bldg. A Crete, IL 60417

## 3.0 Analyses Requested

Samples 1-12 L. monod	ocytogenes Indicate Present /Absent	
-----------------------	-------------------------------------	--

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.

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

Individual laboratory results are in Appendix A

## Appendix A

## Results for (M05) Meat Microbiology 3

### Listeria monocytogenes

### Shipment on December 3, 2018 Site identification: 158157

Sample Number	Listeria monocytogenes Expected Results	Result for Site ID 158157 Presence or Absence of Listeria monocytogenes		
1	Uninoculated N/A Absent	Listeria monocytogenes Absent		
2	Uninoculated N/A Absent	Listeria monocytogenes Absent		
3	Listeria monocytogenes Present	Listeria monocytogenes Present		
4	Uninoculated N/A Absent	Listeria monocytogenes Absent		
5	Uninoculated N/A Absent	Listeria monocytogenes Absent		
6	Uninoculated N/A Absent	Listeria monocytogenes Absent		
7	Listeria monocytogenes Present	Listeria monocytogenes Present		
8 Uninoculated N/A Absent		Listeria monocytogenes Absent		
9 Uninoculated N/A Absent		Listeria monocytogenes Absent		
10	Uninoculated N/A Absent	Listeria monocytogenes Absent		
11	Listeria monocytogenes Present	Listeria monocytogenes Present		
12	Uninoculated N/A Absent	Listeria monocytogenes Absent		



The Scientific Association Dedicated to Analytical Excellence®

# **AOAC® Laboratory Proficiency Testing Program Combination Meat Microbiology 3 (M05) Instructions**

Enclosed are twelve samples, each containing 25 grams of ground or 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. Results are due within 2 weeks of the shipment date.

Store samples frozen (-20 °C) until analysis date. 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 POSITIVE or NEGATIVE. Use the comment section to provide additional information.

#### Appendix C Homogeneity Results - Qualitative **Meat Microbiology - M05** Ship Date December 3, 2018

#### Results of Homogeneity Testing - Listeria spp. 25g Sample

	Inoculation Scheme	Replicate 1	Replicate 2	
L-10	L. innocua	positive	positive	Passed
L-11	L. monocytogenes	positive	positive	Passed
L-12	Uninoculated	negative	negative	Passed

#### Appendix D Inoculation Scheme Meat Microbiology - MO5 Ship Date December 3, 2018

L-1	L. innocua	
L-2	L. innocua	
L-3	L. monocytogenes	
L-4	Uninoculated	
L-5	L. innocua	
L-6	L. innocua	
L-7	L. monocytogenes	
L-8	Uninoculated	
L-9	L-9 L. innocua	
L-10	L. innocua	
L-11	1 L. monocytogenes	
L-12	Uninoculated	