EFFECTIVE DATE	N P Analytical Laboratories	METHOD CODE
REVISED: 02/20/24	LABORATORY TEST METHOD SUMMARY	LSV, LMV, LS125, LM125
REPLACES: 08/10/20	DETECTION AND IDENTIFICATION OF *LISTERIA* SPECIES AND *LISTERIA MONOCYTOGENES*	PAGE 1 OF 1
KEY WORDS: *Listeria* species, *Listeria. monocytogenes,* VIDAS®, LPT		

1. SCOPE AND PURPOSE:

This method employs procedures for the detection of *Listeria* species (LSV) and the identification of *Listeria monocytogenes* (LMV), using VIDAS® LPT in foods, animal feeds, food and feed ingredients, and process/environmental samples.

2. PRINCIPLE:

2.1. Samples are incubated in an enrichment broth selective for *Listeria* . Following incubation, the broth is transferred to a strip and run on the VIDAS® machine. *Listeria* VIDAS® UP results are presumptive positive or negative for *Listeria* species (LSV). The presence of *Listeria* species is confirmed through isolation on selective agars, then screening tests. If *Listeria monocytogenes* (LMV) is requested, typical colonies are further characterized using biochemical tests.

2.2. Known Interferences:

2.2.1. A pure culture is required in order to establish valid biochemical test reactions during the identification of *Listeria* isolates.

2.2.2. Competing microorganisms may obscure or inhibit *Listeria* colony formation on selective agar plates.

2.2.3. Some inhibitors for non-*Listeria* will become toxic to *Listeria* with age. Follow directions on use of media and chemical inhibitors added to media.

2.2.4. More than one species of *Listeria* may be found in a sample, making isolation of *Listeria monocytogenes* on selective agar more difficult.

2.2.5. Failure for a *Listeria* cell to grow to a detectable amount can result from nutritional deficiencies of the enrichment or failure of an injured cell to repair itself.

2.2.6. Some sample matrices will coagulate upon heating in the Heat & Go Unit. A coagulated sample may not get drawn into the SPR, resulting in a potential false negative.

3. PRECISION:

Records of method precision based on Method Validation and/or known control summaries are located in the QA Master file for this test method. Assay precision may vary with test matrix and analyte level. Terms used to describe method precision are defined in NPSOP3040, *Verification of Microbiological Tests*.

4. REFERENCES:

4.1. LI-00.705 - Detection of *Listeria* spp. by VIDAS LPT

4.2. ISO-11290-1:2017 - Microbiology Of Food And Animal Feeding Stuffs – Horizontal Method For The Detection Of *Listeria* Monocytogenes And *Listeria* Spp.