Listeria Selective Agar

Intended Use
Listeria Selective Agar with addition of selective supplement is recommended for selective isolation and cultivation of *Listeria monocytogenes.*

Summary
Listeria monocytogenes has been isolated from numerous environmental sources such as silage, soil, decaying vegetation, sewage, damp earth, straw and faeces. Listeria Selective Agar Base with Listeria Selective Supplement is used for isolation and cultivation of *L. monocytogenes* from clinical specimens. The basic media is formulated as per Lovett *et al.,* with the addition of agar.

Principle
Casein enzymic hydrolysate, papaic digest of soyabean meal and yeast extract provide carbon and nitrogen compounds essential for bacterial metabolism. Dextrose is the energy source. The medium is rendered selective by addition of selective supplement. Amphotericin B inhibits the growth of saprophytic fungi. Nalidixic acid inhibits growth of Gram-negative organisms and acriflavin suppresses Gram-positive microorganisms.

Formula*
Ingredients	**g/L**
Casein Enzymic Hydrolysate	17.0
Papaic Digest of Soyabean Meal	3.0
Yeast Extract	6.0
Sodium Chloride	5.0
Dipotassium Hydrogen Phosphate	2.5
Dextrose	2.5
Agar	15.0
Final pH (at 25°C)	7.3 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen
Food and Dairy samples; Water samples

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 51.00 g of the powder in 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Cool to room temperature and aseptically add rehydrated contents of 1 Vial of Listeria Selective Supplement I (204120570005) as desired.
5. Mix well before dispensing.

Quality Control

Dehydrated Appearance: Cream to yellow coloured, homogeneous, free flowing powder.
Prepared Appearance: Light yellow coloured, slightly opalescent gel forms in petridishes.
Cultural Response: Cultural characteristics is observed after an incubation at 35°C -37°C for 24-48 hours.

Organism (ATCC)	Growth
Listeria monocytogenes strain Li 23 (19114)	Good
Listeria monocytogenes serotype 4b (19115)	Good
Candida albicans 3147 (10231)	Inhibited
Staphylococcus aureus subsp. *aureus* (25923)	Partial Inhibition
Escherichia coli (25922)	Inhibited

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Gray M. L., 1960, Science, 132:1767.
2. Weis J., and Seeliger H. P. R., 1975, Appl. Microbiol. 30:29.
3. Lovette J., Francis D.W and Hunt J.M., 1987, J. Food Protection, 50:188.
4. Lee W.K. and McClain D., 1986, Appl. Environ, Microbiol., 52:1215.
5. McClain D. and Lee W.H., 1988, J. Assoc. off. Anal. Chem., 71:660.
6. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201120250500	Dehydrated Culture Media	500 g

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.