

HiCulture™ *Listeria* Isolation and Transport Swabs with MS1145S metal stick

Intended Use:

Recommended for transportation of *Listeria* species from clinical specimens.

Composition**

| Ingredients | Gms / Litre |
|-------------------------|-------------|
| Peptone special | 23.000 |
| Lithium chloride | 15.000 |
| Sodium chloride | 5.000 |
| Corn starch | 1.000 |
| Esculin | 1.000 |
| Ammonium ferric citrate | 0.500 |
| Agar | 10.000 |
| Final pH (at 25°C) | 7.0±0.2 |

**Formula adjusted, standardized to suit performance parameters

Directions

Using the capped swab provided along with the medium containing tube, collect the sample or specimen from surface. Discard the cap of the tube and insert the capped swab with the sample till the bottom of the medium. Tighten the cap firmly. The specimen will be preserved during transportation and also the viability of the organisms will be maintained but it will diminish over the time. Some growth of contaminants may occur during longer period of transport. After the transportation, the specimen should be inoculated in proper medium as soon as possible. The cultures on transport swabs must not be kept at room temperature for more than 24 hours.

Principle And Interpretation

Effective recovery of microorganisms and its identification is dependent on a number of factors such as collection and transportation to the laboratory under conditions which allow maintenance of viability. *Listeria monocytogenes* is the only species of the genus *Listeria* that is important as a human pathogen. *Listeria seeligeri*, *Listeria welshimeri* and *Listeria ivanovii* have been related with animal diseases. In any case, all the species are pathogenic between the ovine and bovine cattle. Positive diagnosis of listeriosis can be obtained only by the isolation and cultivation of the responsible bacteria from blood or CSF samples of the affected organisms.

Peptone special serves as the source of essential nutrients to the organisms. Corn starch serves to neutralize the toxic metabolites formed. Lithium chloride and the antibiotics inhibit gram-negative bacteria and most gram-positive organisms but certain strains of Staphylococci may grow as esculin negative colonies. *L. monocytogenes* hydrolyzes esculin to esculetin and dextrose. Esculetin reacts with ferric ions and produces black zones around the colonies. Although the selectivity of the medium is enough to allow the isolation and differentiation by direct surface inoculation, a previous dilution of the inoculum is advisable or even more when the sample is highly polluted.

Type of specimen

Clinical samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,2). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Further recovery from this enriched medium onto selective media is required.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Sterile Listeria Oxford Medium in tube with Sterile Cotton Swabs with metal stick.

Colour

Dark amber coloured medium with blue cast

Quantity of Medium

8ml of medium in tubes

Sterility test

Passes release criteria

Reaction

6.80- 7.20

Cultural response

Viability of following was established for a period of 48 hours. Following results were observed when recovered on Listeria Oxford Medium (M1145) after incubation at 35-37°C for 24-48 hours.

| Organism | Recovery |
|---|----------------|
| <i>Enterococcus faecalis</i> ATCC 29212 (00087*) | Poor-good |
| <i>Enterococcus hirae</i> ATCC 10541 (00011*) | Poor-good |
| <i>Bacillus subtilis</i> subsp. <i>spizizenii</i> ATCC 6633 (00003*) | None-poor |
| <i>Escherichia coli</i> ATCC 25922 (00013*) | None-poor |
| <i>Listeria monocytogenes</i> ATCC 19111 (00020*) | Good-luxuriant |
| <i>Listeria monocytogenes</i> ATCC 19112 | Good-luxuriant |
| <i>Listeria monocytogenes</i> ATCC 19117 | Good-luxuriant |
| <i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*) | Fair-good |

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 5-25°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

Reference

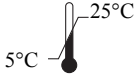
1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

 IVD

In vitro diagnostic medical device



CE Marking



Storage temperature



Do not use if package is damaged

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