



LAB589 LEE Broth – Listeria Express Enrichment Broth

Description

Listeria Express Enrichment Broth (LEE Broth) is a selective enrichment broth for the detection of *Listeria*. Developed to give improved growth rates of *Listeria* over traditional selective enrichment media, LEE Broth enhances the expression of target antigens for most commercially available immunological test kits/methods whilst maintaining adequate suppression of potential non-target organisms. Selective components are blended into the powder, removing the requirement for supplementation.

Compared with more traditional methods, immunological tests, such as ELISA, require relatively high levels of target organisms to achieve a reliable positive result. LEE Broth has been specifically designed to stimulate growth from low numbers to the required high levels within a 24 hour period. Therefore, LEE Broth offers an excellent choice for laboratories employing immunological test methods for detection of *Listeria* in food products.

Lab M LEE Broth can be used as an enrichment broth prior to plating on selective media such as Harlequin™ Listeria Chromogenic Agar ISO (HAL010 / PIN001); as secondary selective enrichment medium following primary enrichment in, for example, Half Fraser Broth (LAB211 or LAB164); or as the enrichment step of a rapid method e.g. ELISA, lateral flow device, PCR.

Typical Formulation

	g/litre
Peptone	13.0
Growth enhancers	8.0
Buffer	22.2
Selective mix	3.0
Grams per litre	46.2

Appearance

Powder: fine, free-flowing, homogeneous, buff

Finished medium: clear, dark straw liquid with yellow fluorescence

pH: 7.2 ± 0.1

Hazard classification

Xi – Irritant

Method for reconstitution

Disperse 46.2g of powder in 1 litre of distilled water. Allow to soak for 10 minutes, swirl to mix and dispense into suitable containers. Sterilise by autoclaving for 15 minutes at 121°C. Allow to cool to ambient temperature prior to use.

Incubation

Incubate at 30°C ± 1°C for 24 ± 1 hour (for optimum performance check at 24 hours precisely). Alternative incubation temperatures may be used if flagella are not the target antigen.



Interpretation

Low cell numbers may express high levels of detection targets therefore further tests (plating, ELISA etc) should be conducted on all samples regardless of presence/absence of turbidity.

Storage

Dehydrated culture media: 10-25°C away from direct sunlight.

Prepared media: 1 month at 2-8°C in the dark.

Minimum Q.C. organisms

Listeria monocytogenes WDCM 00020

Listeria ivanovii WDCM 00018

Enterococcus faecalis WDCM 00087 (inhibition)