

Listeria Enrichment Broth Base (i23093)

For the selective enrichment of *Listeria*

Industry: Clinical / Food

Principles & Uses

Listeria Enrichment Broth Base, as per Lovett's formulation, is designed for the enrichment of *Listeria* spp. Peptones provide essential nitrogen and nutrients for microbial growth, while glucose serves as a carbohydrate source. Yeast extract contributes amino acids and B-group vitamins. Maintaining osmotic balance, sodium chloride is crucial, and dipotassium phosphate acts as a buffer in the medium.

Listeria monocytogenes is a pathogenic organism found in various environments. Careful handling is emphasized due to the high pathogenicity of *Listeria monocytogenes*.

Composition (gr/L)

Peptone from Casein 17 g, Peptone from Soymeal 3 g, D (+) glucose 2.5 g, Sodium Chloride 5 g, di-Potassium Hydrogen Phosphate 2.5 g, Yeast Extract 6 g.

Final pH at 25°C 7.3 ± 0.2

Preparation from dehydrated Powder

Dissolve 18 g in 500 ml of distilled water. Autoclave (15 min. at 121°C). Cool to 45 - 50°C. Aseptically add the content of 1 vial of Listeria Enrichment Supplement.

Quality Control

Dehydrated Appearance: Light beige, free-flowing, homogeneous.

Prepared Appearance: Light amber, slightly opalescent.

Reaction of 3.6% Solution at 25°C: pH 7.3 ± 0.2

Cultural Response

Cultural response was observed after 18 - 48 hours of incubation at 30 ± 2°C.

Organism (ATCC*)	Recovery
<i>Listeria monocytogenes</i> (19114)	Good
<i>Listeria monocytogenes</i> (13932)	Good
<i>Listeria innocua</i> (33090)	Good
<i>Escherichia coli</i> (25922)	Inhibition
<i>Saccharomyces cerevisiae</i> (9080)	Inhibition

*ATCC is a registered trade mark of the American Type Culture Collection.



Listeria monocytogenes (left). Prepared Culture Media (right).

Storage

Keep the container at 15-30 °C. Store prepared medium at 2-8 °C.