Heart Infusion Broth

Cat. 1323

General purpose medium used for the growth of fastidious microorganisms.

Practical information

Aplications	Categories
Enrichment	Fastidious microorganisms

Industry: General cultivation

Principles and uses

Heart Infusion Broth (HIB) is a non-selective, general purpose medium used for the cultivation of many pathogenic and fastidious microorganisms. Highly pathogenic organisms, such as meningococci and pneumococci, can be grown on an infusion medium without enrichments.

The nutritionally rich base of beef heart infusion and tryptose provide nitrogen, vitamins, minerals and aminoacids essential for the growth of a variety of microorganisms, and supply nutritional requirements for the growth of fastidious microorganisms. Sodium chloride supplies essential electrolytes for transport and osmotic balance.

Formula in g/L

Beef heart infusion	10	Sodium chloride	5
Tryptose	10		

Preparation

Suspend 25 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121 ºC for 15 minutes.

Instructions for use

- Take the inoculum with a sterile loop.
- Submrge the handle into the medium and shake gently.
- Incubate at 35±2 ºC for 18-48 hours.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fine powder	Toasted	Amber	7,4±0,2

Microbiological test

Incubation conditions: (35±2 ºC / 18-48 h).

Microrganisms	Specification
Streptococcus pyogenes ATCC 19615	Good growth
Staphylococcus aureus ATCC 25923	Good growth
Streptococcus pneumoniae ATCC 6305	Good growth

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

Elliott, Kaysner, Jackson and Tamplin. 1995. In FDA bacteriological analytical manual, 8th ed. AOAC International, Gaithersburg, Md.
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Atlas. 1997. Handbook of microbiological media, 2nd ed. CRC Press, Inc., Boca Raton, Fla.