L Broth

M928

Intended Use:

Recommended for cultivation of anaerobic microorganisms.

Composition**

Ingredients	g / L
HL infusion from #	23.000
Peptone	10.000
HL extract $	30.000
Dipotassium hydrogen phosphate	1.000
Final pH (at 25°C)	6.8±0.2

**Formula adjusted, standardized to suit performance parameters
Equivalent to Liver, infusion from
$ Equivalent to Liver tissues (extracted)

Directions

Suspend 64.0 grams in 1000 ml purified/distilled water. Soak for 15 minutes with occasional stirring. Dispense in 18 mm diameter tubes to a depth of 50 mm so that bottom of the tube is filled with liver tissues. Sterilize by autoclaving at Δ115°C for 20 minutes. Cool, inoculate and seal with a layer of sterile 2% agar solution.

Δ Corresponds to 10lbs pressure.

Principle And Interpretation

Scarr recommended Liver Broth for the examination of Canners sugar for hydrogen swells caused by thermophilic anaerobes (1) and also for maintaining pure cultures of aerobes and anaerobes.

This medium contains liver particles which support luxuriant growth for saccharolytic or putrefactive mesophilic and thermophilic anaerobes. A 20% w/v solution of the sugar steamed for 30 minutes is inoculated into Liver Broth, sealed with agar. The standard proposed was a maximum of 1 positive tube in six tubes, with 20 ml inocula and incubated for 72 hours at 56°C. Some organisms like *Thermoanaerobacterium thermosaccharolyticum* (*Clostridium thermosaccharolyticum*) produces gas which often pushes the agar plug towards the top of the tube and some organisms digest the solid liver tissues.

The medium should be used on the same day of preparation as the stored medium may absorb the air and then re-steaming is necessary which darkens the medium.

Type of specimen

Clinical samples - wounds, pus, etc.

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. For professional use only. 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 biochemical and serological tests must be carried out for further identification.

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

Brown coloured granules

Colour and Clarity of prepared medium

Medium amber coloured, clear to slightly opalescent supernatent over insoluble granules

Reaction

Reaction of 6.4% w/v aqueous suspension at 25°C. pH : 6.8±0.2

pH

6.60-7.00

Cultural Response

Cultural characteristics observed after an incubation at 55-57°C for 48-72 hours .

Organism	Inoculum (CFU)	Growth
Thermoanaerobacterium thermosaccharolyticum ATCC 7956 (00135*)	50-100	luxuriant

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. 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 (2,3).

Reference

1.Scarr M. P., 1958, DSIR, Proc. 2nd Internat. Symp. Food Microbiol., 1957, HMSO London, pp-29.
2.Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3.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.

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IVD *In vitro* diagnostic medical device

10°C 30°C Storage temperature

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CE CE Marking

Do not use if package is damaged