

Hartley Broth

Intended Use

Hartley Broth is used for cultivation of wide variety of bacteria from blood specially Streptococci and *Corynebacterium diphtheriae*.

Summary

Hartley described the value of tryptic digest of muscle for the production of diphtheria toxin. Since then it is used as a general-purpose broth, capable of initiating the growth of demanding (fastidious) organisms from a small inocula. Hartley's Digest Broth can be used for the recovery of fastidious organisms such as Group A, C, G Streptococci and *Streptococcus pneumoniae* from small inocula. Douglas used the same medium to recover *Corynebacterium diphtheriae*, while Monckton used it in an enrichment medium for *C. diphtheriae*. Hartley's Digest Broth may be used for cultivation of blood samples, sterility testing, production of diphtheria toxin etc.

Principle

Hartleys Digest Broth is prepared as per the method described by Cruickshank. MX Nutrients 1 is used as a substitute of Tryptic digest of heart muscle in the formulation for product performance. It provides nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential nutrients.

Formula*

Ingredients	g/L
MX Nutrients 1#	29.0
Final pH (at 25°C)	7.6 ± 0.2

*Adjusted to suit performance parameters.

#Equivalent to intended performance of Tryptic Digest of Heart Muscle

Directions

1. Bring the Hartley Broth vial to the room temperature 22°C-30°C.
2. Use Hartley Broth as per required application.

Quality Control

Appearance: Light yellow coloured, clear solution without any precipitate.

Cultural Response: Cultural characteristics observed after an incubation of 18-24 hours at 30°C-35°C.

Organism (ATCC)	Growth
<i>Corynebacterium diphtheriae</i> (8024)	Good
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (25923)	Good
<i>Streptococcus pyogenes</i> Strain Bruno (19615)	Good
<i>Streptococcus pneumoniae</i> (6303)	Good

Note: Inoculum cfu for good growth is 10-100.

Remarks

1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discoloration, drying or other sign of deterioration.
2. Good laboratory practices and hazard precautions must be observed at all times.
3. After use media containers, sample, sample containers and other contaminated materials must be sterilized or incinerated before discarding.
4. All autoclaved biohazards should be disposed off in accordance with state and local environmental regulations.
5. Only qualified personnel who have been trained in microbiological procedures should handle all infected specimens and inoculated culture media.
6. User should ensure that any machinery or apparatus used and by chance contaminated must be safely disinfected or sterilized. The environment in which microbiological cultures are handled must also be taken into account.

Storage and Stability

1. Store the ready to use Hartley Broth at 15°C-25°C in a cool, dry place away from light.
2. Stability of the kit is as per expiry date mentioned on the label.

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

References

1. Hartley P., 1922, J. Path. Bact., 25:479.
2. Monckton J. C., 1947, Bull Inst. Med. Lab. Technol., 13(1):2.
3. Douglas S. R., 1922-23, Brit. J. Expt. Pathol., 3:263.
4. Cruickshank R., 1962, "Mackie and McCartneys Handbook of Bacteriology" 10th Ed., Livingstone Ltd., Edinburgh and London, pp. 192.
6. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description	Pack Size
203080050005	Ready Prepared Tube	50 x 5 mL

 Temperature Limit	 Manufacturer	 Batch Code	 Date of Manufacture
 Catalogue Number	 Consult Instructions for use	 Use-by Date	 This way up

Revision: 0825/VER-03

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.