

TM 374 - HARTLEY'S DIGEST BROTH

INTENDED USE

For cultivation of various bacteria from blood especially Streptococci and *Corynebacterium diphtheriae*.

PRODUCT SUMMARY AND EXPLANATION

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.

COMPOSITION

Ingredients	Gms / Ltr
Tryptic digest of heart muscle	29.000

PRINCIPLE

Hartley's Digest Broth is prepared as per the method described by Cruickshank. Tryptic digest of heart muscle provides nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential nutrients.

INSTRUCTION FOR USE

- Dissolve 29.0 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in tubes or flasks as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light yellow coloured, clear solution without any precipitate.
pH (at 25°C) : 7.6±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Corynebacterium diphtheriae</i>	11913	50-100	Luxuriant	35 - 37°C	24-48 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	35 - 37°C	24-48 Hours



<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	25923	50-100	Luxuriant	35 - 37°C	24-48 Hours
<i>Streptococcus pneumoniae</i>	6303	50-100	Luxuriant	35 - 37°C	24-48 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Luxuriant	35 - 37°C	24-48 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.













Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Cruickshank R., 1962, "Mackie and McCartneys Handbook of Bacteriology" 10th Ed., Livingstone Ltd., Edinburgh and London, pp. 192.
2. Douglas S. R., 1922-23, Brit. J. Expt. Pathol., 3:263.
3. Hartley P., 1922, J. Path. Bact., 25:479.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. 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.
6. Monckton J. C., 1947, Bull Inst. Med. Lab. Technol., 13(1):2.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Buckstrasse 10, 48163 Münster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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