

TM 520 - HEART INFUSION BROTH (BEEF HEART INFUSION BROTH)

INTENDED USE

For isolation and cultivation of various fastidious microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Fastidious organisms having exacting nutritional requirement could be cultivated on infusion media, as demonstrated by Huntoon. A liquid medium containing an infusion of meat was one of the first media used for the cultivation of bacteria. These infusion media need not be further supplemented by the addition of supplements for cultivation of fastidious bacteria. Heart Infusion Broth, containing infusion from beef heart is used for the isolation and cultivation of a wide variety of fastidious organisms. Heart infusion media can also be used for the cultivation of *Vibrio* species. Heart Infusion Broth can also be supplemented with glucose, horse serum and antibiotics for the cultivation a wide variety of organisms. Heart Infusion Broth can be used as a base to study carbohydrate fermentation. This medium was used for isolation and enumeration of haemolytic Streptococci in milk.

COMPOSITION

Ingredients	Gms / Ltr
Beef heart, infusion from	500.000
Tryptose	10.000
Sodium chloride	5.000

PRINCIPLE

Tryptose and Beef heart, infusion from provide nutritional requirements for the pathogenic bacteria. Sodium chloride maintains the osmotic equilibrium of the medium.

INSTRUCTION FOR USE

- Dissolve 25.0 grams in 1000 ml of distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- If desired 5% v/v sterile defibrinated blood may be added.
- Mix well and aseptically pour into sterile tubes or flasks as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Basal medium: Light yellow coloured, clear to slightly opalescent solution. After addition of 5% sterile defibrinated blood: Cherry red coloured, opaque solution in tubes.
pH (at 25°C)	: 7.4±0.2

INTERPRETATION

Cultural characteristics observed with added 5%w/v sterile defibrinated blood, after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period



<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	35 - 37°C	18-48 Hours
<i>Neisseria meningitidis</i>	13090	50-100	Good-luxuriant	35 - 37°C	18-48 Hours
<i>Streptococcus pneumoniae</i>	6303	50-100	Good-luxuriant	35 - 37°C	18-48 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Good-luxuriant	35 - 37°C	18-48 Hours
<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	25923	50-100	Good-luxuriant	35 - 37°C	18-48 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

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3. Diagnostic Procedures and Reagents, 1950, 3rd Edition, 13
4. FDA Bacteriological Analytical Manual, 8th Ed., AOAC International, Gaithersburg, MD. 5. Huntoon F. M., 1918, J. Inf. Dis., 23:169.
5. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
6. 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.
7. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of
8. Foods, American Public Health Association, Washington, D.C.
9. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.



 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, 49163 Muenster, 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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