TMT 033-BRAIN HEART INFUSION BROTH

INTENDED USE

For the cultivation of fastidious and non-fastidious microorganisms, including aerobic and anaerobic bacteria, from clinical and non-clinical specimens.

PRODUCT SUMMARY AND EXPLANATION

BHI Broth is useful for cultivating a wide variety of microorganisms since it is a highly nutritive medium. It is also used to prepare the inocula for antimicrobial susceptibility testing. BHI Broth is a modification of the original formulation of Rosenow, where he added pieces of brain tissues to dextrose broth. BHI Broth is also the preferred medium for anaerobic bacteria, yeasts and moulds. This medium is nutritious and well buffered to support the growth of wide variety of organisms. With the addition of 10% defibrinated sheep blood, it is useful for isolation and cultivation of *Histoplasma capsulatum* and other fungi. For selective isolation of fungi, addition of gentamicin and/or chloramphenicol is recommended.

COMPOSITION

Ingredients	Gms / Ltr
Calf brain infusion from	12.500
BHI powder	5.000
Proteose peptone	10.000
Dextrose (Glucose)	2.000
Sodium chloride	5.000
Disodium hydrogen phosphate	2.500

PRINCIPLE

Proteose peptone, Calf brain infusion powder and BHI broth serve as sources of carbon, nitrogen, essential growth factors, amino acids and vitamins. Dextrose serves as a source of energy. Disodium phosphate helps in maintaining the buffering action of the medium whereas sodium chloride maintains the osmotic equilibrium of the medium.

INSTRUCTION FOR USE

Inoculate the sample and Incubate at specified temperature and time.

QUALITY CONTROL SPECIFICATION

Appearance of prepared medium	:	Light to medium amber coloured, clear solution without any precipitate.
Quantity of Medium	:	5 ml of medium in tubes.
pH (at 25°C)	:	7.4 ± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Neisseria meningitidis	13090	50-100	Good-luxuriant	35-37°C	24-48 Hours

Streptococcus pneumoniae	6303	50-100	Good-luxuriant	35-37°C	24-48 Hours
Streptococcus pyogenes	19615	50-100	Good-luxuriant	35-37°C	24-48 Hours
Candida albicans	10231	50-100	Good-luxuriant	35-37°C	24-48 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Good-luxuriant	35-37°C	24-48 Hours
Enterococcus faecalis	29212	50-100	Good-luxuriant	35-37°C	24-48 Hours

PACKAGING:

Pack of 25 Ready-To-Use Liquid Medium tubes containing 5 ml in each tube.
Pack of 50 Ready-To-Use Liquid Medium tubes containing 5 ml in each tube.

STORAGE

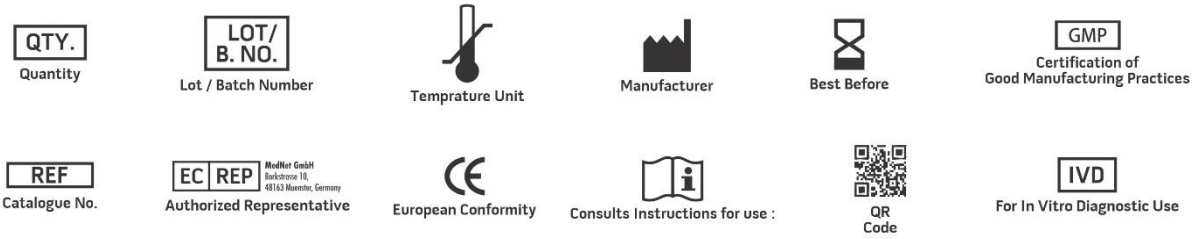
On receipt, store tubes in the dark at 10-25°C. Avoid freezing and overheating. Do not open until ready to use. Minimize exposure to light. Tubed media stored as labeled until just prior to use may be inoculated up to the expiration date and incubated for the recommended incubation times. Allow the medium to warm to room temperature before inoculation.

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.

REFERENCES

1. Atlas R. M., 1993, Handbook of Microbiological Media, 147-153, CRC Press, Boca Raton, FL. 50-100 50-100 50-100 50-100 50-100 50-100
2. Conant N. F., 1950, Diagnostic Procedures and Reagents, 3rd Ed., APHA Inc., New York
3. Howard B., Keiser J. F., Weissfeld A. et al, 1994, Clinical and Pathogenic Microbiology, 2nd Ed., Mosby Co.
4. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
5. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
6. Rosenow, 1919, J. Dental Research, 1:205.
7. Roseburg T. et al, 1944, J. Inf. Dis., 74:131



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

***For Lab Use Only**

Revision: 25th March. 2022