

BHI Broth

Intended Use

BHI Broth is a highly nutritious general-purpose liquid medium for cultivation of variety of fastidious and non-fastidious microorganisms, including aerobic and anaerobic bacteria.

Summary

BHI Broth is a modification of the original formulation of Rosenow, where he added pieces of brain tissues to dextrose broth. This medium is especially useful as a growth and suspension medium for Staphylococci which is to be tested for coagulase production and when supplemented with yeast extract, hemin and menadione, it was found to be better in producing heavy growth of five species of BHI agar is included in the Bacteroides. Bacteriological Analytical Manual for food and cosmetics testing and is also recommended by APHA for the examination of foods and milk.

Principle

Proteose peptone, infusion from calf brain and beef heart provides sources of nitrogen, carbon, sulphur and other growth factors. Dextrose is the fermentable carbohydrate and disodium phosphate is the buffer. Sodium chloride maintains the osmotic balance. Addition of defibrinated sheep blood provides additional essential growth factors for more fastidious organisms.

Formula*

Ingredients	g/L
Beef Heart Infusion from 250 g	9.8
Calf Brain Infusion from 200 g	7.7
Proteose Peptone	10.0
Sodium Chloride	5.0
Dextrose	2.0
Disodium Phosphate	2.5
Final pH (at 25°C)	7.4 ± 0.2

*Adjusted to suit performance parameters.

Directions

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

Quality Control

Appearance: Light amber coloured, slightly opalescent solution.

Cultural Response: Cultural response is observed after an incubation of 18-24 hours at 30°C-35°C and subculturing is carried out on Blood Agar.

Organism (ATCC)	Growth
<i>Enterococcus faecalis</i> (29212)	Good
<i>Streptococcus pyogenes</i> Strain Bruno (19615)	Good
<i>Streptococcus pneumoniae</i> (6305)	Good
<i>Neisseria gonorrhoeae</i> (49226)	Good

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

Remarks

1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discolouration, drying or any 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 BHI Broth at 15°C-25°C, away from light.
2. Stability of BHI Broth 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.

Limitations

1. Just before use, the tube should be placed in boiling water bath for few minutes to remove absorbed oxygen and cooled rapidly without shaking.
2. Brain Heart Infusion Broth with addition of 1.5% agar should not be used for detection of haemolytic activity of Streptococci, since the presence of dextrose in it may cause atypical haemolytic reaction when used in blood containing media.

Reference

1. Rosenow, 1919, J. Dental Res; 1:205.
2. US Food and Drug Adm; 1998, Bacteriological Analytic Manual, 8th Ed; Rev. A, AOAC, International, Gaithersburg, Md. Amies C. R., 1967, Can. J. Public Health, 58:296.
3. Downes and Ito (ed.) 2001, Compendium of Methods for The Microbiological Examination of Foods, 4th Edition, APHA Washington DC.
4. H. Wehr and J. Frank, 2004, std. Methods for The Examination of dairy Products, 17th Edition; APHA, Washington, DC.
5. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description	Pack Size
203020450005	Ready Prepared Tube	50 x 5 mL

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.
