

# BHI (Brain Heart Infusion) Agar



Medium used for the cultivation and enumeration of fastidious, aerobic and anaerobic microorganisms.

\*Equally use with NIER (MB-B1007N).

## • CONTENTS (Liter)

Beef Heart, Infusion	9.8 g
Calf Brains, Infusion	7.7 g
Proteose Peptone	10.0 g
Dextrose	2.0 g
Sodium Chloride	5.0 g
Disodium Phosphate	2.5 g
Agar	15.0 g
Final pH = 7.4 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 52.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. If necessary, aseptically add 5 - 10% of Sheep Blood Defibrinated (MB-S1876) or Horse Blood Defibrinated (MB-H1883). Mix well. Pour into petri dishes.

## • INTERPRETATION

BHI (Brain Heart Infusion) Agar is a medium used for the cultivation and enumeration of fastidious, aerobic and anaerobic microorganisms. Beef heart, infusion, calf brains, infusion, proteose peptone provide nitrogen, vitamins, and carbon sources. Dextrose is the carbohydrate source. Sodium chloride maintains the osmotic balance. Disodium phosphate is the buffering agent. Agar is the solidifying agent.

## • TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 33 - 37°C for 18 - 24 up to 72 hours under appropriate condition, \*25 - 28°C for 24 hours (NIER). Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

### Prepared medium

Appearance: slightly opalescent

Color: light amber

Incubation conditions: 33 - 37°C / 18 - 24 up to 72 hours under appropriate condition

\*25 - 28°C / 24 hours (NIER)

Microorganism	ATCC	Inoculum CFU	Growth
<i>Staphylococcus aureus</i>	25923	50-100	good
<i>Streptococcus pneumoniae</i>	6305	50-100	good
<i>Streptococcus pyogenes</i>	19615	50-100	good
* <i>Yersinia enterocolitica</i>	23715	50-100	good

## • STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

## • REFERENCES

1. Ajello, L., L.K. Georg, W. Kaplan, and L. Kaufman. 1966 "Laboratory manual for medical mycology" .
2. Onderdonk, A.B., and S.D. Allen.1995."Clostridium", p.574-586. Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington,.
3. NCCLS document M22-A2, 1996. Approved Standard.
4. Rosenow, E.C. 1919. Jour. Dent. Res., 1: 205-249.
5. Refer to the NIER.

## • PACKAGE

Cat. No : MB-B1007 BHI (Brain Heart Infusion) Agar	500 G
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## • MICROBIAL CULTURE IMAGES



None

*Staphylococcus aureus* ATCC 25923\**Yersinia enterocolitica* ATCC 23715

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\*25 - 28°C / 24 hours (NIER)