

TM 1994 – BHI AGAR W/ 3.0% AGAR (BRAIN HEART INFUSION AGAR WITH 3.0% AGAR)

INTENDED USE

For cultivation of fastidious microorganisms using hard (3%) agar gel.

PRODUCT SUMMARY AND EXPLANATION

This is highly nutritious medium that can support luxuriant growth of wide variety of microorganisms. It is a general purpose culture medium used for primary isolation of aerobic bacteria from clinical specimens. Brain Heart Infusion Agar with 3%Agar is used for cultivation of fastidious microorganisms using hard (3%) agar gel.

COMPOSITION

Ingredients	Gms / Ltr		
Calf brain, infusion from	12.500		
Beef heart, infusion from	5.000		
Proteose peptone	10.000		
Sodium chloride	5.000		
Dextrose (Glucose)	2.000		
Disodium hydrogen phosphate	2.500		
Agar	30.000		

PRINCIPLE

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

INSTRUCTION FOR USE

- Dissolve 67.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium: Light amber coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 7.4±0.2

INTERPRETATION

Cultural characteristics observed after incubation.











Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Candida albicans	10231	10-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Shigella flexneri	12022	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Staphylococcus aureus luxuriant subsp. aureus	25923	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Streptococcus pneumoniae	6303	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours

PACKAGING:

In pack size of 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.

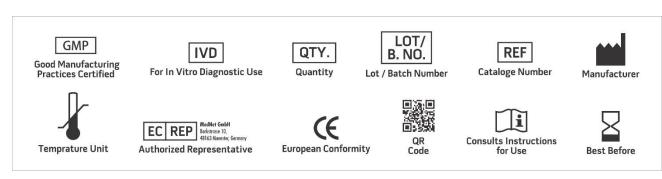
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. Conant N.F 1950, Diagnostic Procedures and Reagents 3rd ed. APHA Inc. New York.
- 2. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
- 3. 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.
- 4. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

















NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019









