

CM 20237 – BHI AGAR (BRAIN HEART INFUSION AGAR WITH 1% AGAR)

INTENDED USE

For the cultivation of fastidious pathogenic bacteria, yeasts and moulds.

PRODUCT SUMMARY AND EXPLANATION

BHI Agar with 1% Agar is similar in composition to Brain Heart Infusion Agar, with the difference being in the concentration of Agar. It is a highly nutritious and can support luxuriant growth of wide variety of microorganisms. It can be further enriched by the addition of blood or rendered selective by adding different antibiotics. It is a general purpose medium used for primary isolation of aerobic bacteria from clinical specimens. Addition of 50 mg/l chloramphenicol or 40mg/l streptomycin or a mixture of 50mg/l gentamicin and 50mg/l chloramphenicol along with 5-10% sterile defibrinated blood is often recommended for inhibition of bacteria and isolation of pathogenic systemic fungi. A mixture of cycloheximide (0.5 g/l) and chloramphenicol (0.05 g/l) is also used for selective isolation of pathogenic fungi (incubation at 25-30°C for 1-2 weeks). Some fungi may be inhibited on this medium with 10% sheep blood, gentamicin and chloramphenicol.

COMPOSITION

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

PRINCIPLE

Proteose peptone, Calf brain Infusion powder and Beef heart infusion powder used in the media serves as sources of carbon, nitrogen, vitamins, amino acids, along with essential growth factors. Dextrose is the energy source. Sodium chloride maintains the osmotic equilibrium of the medium while disodium phosphate buffers the medium. Defibrinated sheep blood added to the basal medium provides essential growth factors for the more fastidious fungal organisms.

INSTRUCTIONFOR USE

Dissolve 47.0grams 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 before pouring. If desired, 20 units Penicillin and 40 µg Streptomycin per ml of medium may be added to make the medium selective for fungi.

QUALITY CONTROL SPECIFICATIONS



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

INTERPRETATION

Cultural characteristics observed after incubation. (If desired add 5% v/v sterile defibrinated blood)

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Growth w/ blood	Recovery w/ blood	Incubation Temperature	Incubation Period
Candida albicans	26790	10-100	Luxuriant	>=70%	Luxuriant	>=70%	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	Luxuriant	>=70%	35-37°C	18-24 Hours
Shigella flexneri	12022	50-100	Luxuriant	>=70%	Luxuriant	>=70%	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Luxuriant	>=70%	Luxuriant	>=70%	35-37°C	18-24 Hours
Streptococcus pneumoniae	6303	50-100	Luxuriant	>=70%	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. Ajello L., Georg L., Kaplan W. and Kaufman L., 1963, CDC Laboratory Manual for Medical Mycology, PHS Publication No. 994, U.S. Govt. Office, Washington, D.C
2. Conant N. F., 1950, Diagnostic Procedures and Reagents, 3rd Ed., APHA Inc.
3. Creitz and Puckett, 1954, Am. J. Clin. Pathol., 24:1318.
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 Tenover F. C., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.



6. Roseburg T. et al, 1944, J. Infect. Dis., 74:131.

 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 Buckrose 10, 48163 Maester, 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 LabUse Only

