CM 22226 – BRAIN HEART INFUSION AGAR

INTENDED USE
Forcultivationoffastidious microorganisms likebacteria, yeasts and molds

PRODUCT SUMMARY ANDEXPLANATION
BHIAgarMedium isa general purpose platingmedium used for the isolation, cultivation, and maintenance of a variety of fastidious and nonfastidious microorganisms.Itis a modification of the original formulation of Rosenow in which the brain tissue has been replaced by brain extractand the calcium carbonate by di-sodium hydrogen phosphate. This medium will also support the growth of aerobicmicroorganisms from a variety of clinical and non-clinical specimens. For selective isolation of fungi, addition of gentamicinand/or chloramphenicol is recommended.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Calf Brain infusions from 200 gm	12.500
Peptone	10.000
Beef heart Infusion from 250 gms	5.000
Sodium chloride	5.000
Disodium hydrogen phosphate	2.500
Dextrose	2.000

PRINCIPLE
Themixture of brain and heartinfusionsprovides organic nitrogen, carbon, and vitamins. Dextrose is the carbohydrate source. A low concentrationofdextroseisused to stimulate early growth. Sodium chloride maintains the osmotic environment. Disodium phosphateisthebuffering agent in this medium and also helps neutralize the acids produced from the utilization of dextrose,thusmaintain viability. Agar is the solidifying agent.

INSTRUCTION FORUSE
1. Brain heart infusionAgarisaready to use solid media in glass bottle. The medium is pre-sterilized; hence sterilization is notrequired.
2. Prior to use, mediuminthebottlecan be melted either by using a pre-heated water bath or any other method.
3. Slightly loosen thecapbeforemelting.
4. Pour liquefied agarintoeachplateas desired and allow them to solidify at room temperature. Plates are now ready to inoculateorrefrigerateforlater use.
5. If desired, aseptICallyadd5%(v/v)sterile defibrinated blood in the liquefied medium (at 45-50°C) before pouring into plates.

QUALITY CONTROL SPECIFICATIONS

Appearance ofthemedium	:	Light amber colored, clear solution.
Quantity of Medium	:	100 ml of the medium in glass bottle
pH (at 25°C)	:	7.4± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION
Culturalcharacteristics observed after incubation. Recovery rate is considered 100% for bacteria growth on Soya Agar and fungal growth on Sabouraud Dextrose Agar

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Growth w/ blood	Recovery w/blood	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	>=70%	Luxuriant	>=70%	35-37°C	24-48 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	Luxuriant	>=70%	35-37°C	24-48 Hours
Streptococcus pneumonia	6303	50-100	Luxuriant	>=70%	Luxuriant	>=70%	35-37°C	24-48 Hours
Shigella flexneri	12022	50-100	Luxuriant	>=70%	Luxuriant	>=70%	35-37°C	24-48 Hours
Candida albicans	10231	50-100	Luxuriant	>=70%	Luxuriant	>=70%	35-37°C	24-48 Hours

PACKAGING

100mlglassbottle.

STORAGE

On receipt, store bottles in the dark at 10 to 25° C. Avoid freezing and overheating. The medium may be used up to the expiration date and incubated for the recommended incubation times. Bottles from unopened packages can be used up to the expiration date. Opened bottles must be used immediately. To prepare plates or tubes from the bottled medium, it must first be liquefied. Do not liquefy any leftovers for a second time

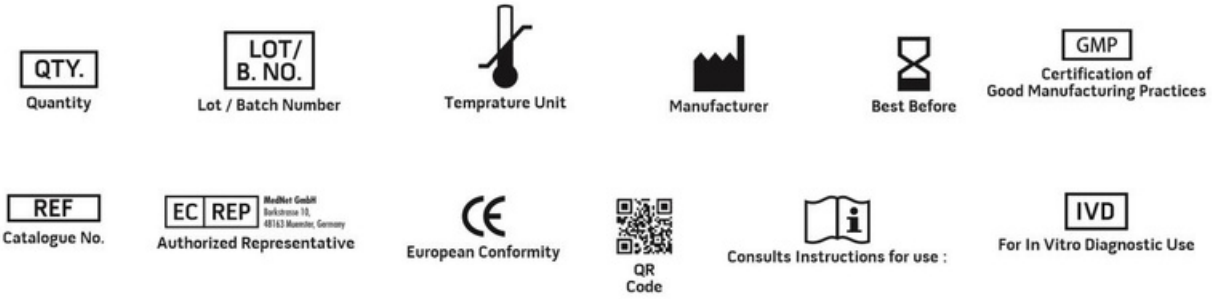
Product Deterioration: Do not use bottles if they show evidence of microbial contamination, discoloration, or any other signs of deterioration

DISPOSAL

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

REFERENCES

1. Rosenow, Dental Research, 1, 205. (1919).
2. Rosenburg T. et al, J. Inf. Dis., 74, 131. (1944).
3. Mc Faddin J.F., Media for Isolation-Cultivation-Identification-Maintainance of medical Bacteria, Vol. I, Williams and Wilkins,Baltimore (1985).
4. Lennette, Balows, Housler and Shadomy (Eds.), Manual of Clinical Microbiology, 4th ed., ASM, Washington, D.C. (1985).
5. Ajello L., George L., Kaplan W. and Kaufman L., CDC Laboratory Manual of Medical Mycology, Atlanta, Ga.: US. DHEW, Center for Disease Control. (1966).
6. McDonough E., Geoge L., Ajello L. and Brinkman S., Mycopathol. Mycol. Appl.; 13, 113. (1960).
7. Selection for vancomycin resistance in clinical isolates of Staphy. haemolticus: : R.S. Schwalbe, et al., J. Infect. Dis. 161, 45. (1990).



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

***ForLabUseOnly**