

CM 22645 – BRAIN HEART INFUSION AGAR

INTENDED USE

For cultivation of fastidious microorganisms like bacteria, yeasts and molds

PRODUCT SUMMARY AND EXPLANATION

BHI Agar Medium is a general purpose plating medium used for the isolation, cultivation, and maintenance of a variety of fastidious and nonfastidious microorganisms. It is a modification of the original formulation of Rosenow in which the brain tissue has been replaced by brain extract and the calcium carbonate by di-sodium hydrogen phosphate. This medium will also support the growth of aerobic microorganisms from a variety of clinical and non-clinical specimens. For selective isolation of fungi, addition of gentamicin and/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

The mixture of brain and heart infusions provides organic nitrogen, carbon, and vitamins. Dextrose is the carbohydrate source. A low concentration of dextrose is used to stimulate early growth. Sodium chloride maintains the osmotic environment. Disodium phosphate is the buffering agent in this medium and also helps neutralize the acids produced from the utilization of dextrose, thus maintain viability. Agar is the solidifying agent.

INSTRUCTION FOR USE

1. Brain heart infusion Agar is ready to use solid media in glass bottle. The medium is pre-sterilized; hence sterilization is not required.
2. Prior to use, medium in the bottle can be melted either by using a pre-heated water bath or any other method.
3. Slightly loosen the cap before melting.
4. Pour liquefied agar into each plate as desired and allow them to solidify at room temperature. Plates are now ready to inoculate or refrigerate for later use.
5. If desired, aseptically add 5% (v/v) sterile defibrinated blood in the liquefied medium (at 45-50°C) before pouring into plates.

QUALITY CONTROL SPECIFICATIONS

| | | |
|--------------------------|---|--------------------------------------|
| Appearance of the medium | : | 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

Cultural characteristics 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 |
|--------------------------------|-------|-------------------|-----------|----------|-----------------|------------------|------------------------|-------------------|
| <i>Escherichia coli</i> | 25922 | 50-100 | Luxuriant | >=70% | Luxuriant | >=70% | 35-37°C | 24-48 Hours |
| <i>Staphylococcus aureus</i> | 25923 | 50-100 | Luxuriant | >=70% | Luxuriant | >=70% | 35-37°C | 24-48 Hours |
| <i>Streptococcus pneumonia</i> | 6303 | 50-100 | Luxuriant | >=70% | Luxuriant | >=70% | 35-37°C | 24-48 Hours |
| <i>Shigella flexneri</i> | 12022 | 50-100 | Luxuriant | >=70% | Luxuriant | >=70% | 35-37°C | 24-48 Hours |
| <i>Candida albicans</i> | 10231 | 50-100 | Luxuriant | >=70% | Luxuriant | >=70% | 35-37°C | 24-48 Hours |

PACKAGING

100ml glass bottle.

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

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

REFERENCES

1. Rosenow, Dental Research, 1, 205. (1919).
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3. Mc Faddin J.F., Media for Isolation-Cultivation-Identification-Maintenance 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. haemolyticus : R.S. Schwalbe, et al., J. Infect. Dis. 161, 45. (1990).

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|--|---|--|---|--|--|
|  Quantity |  Lot / Batch Number |  Temperature Unit |  Manufacturer |  Best Before |  Certification of Good Manufacturing Practices |
|  Catalogue No. |  Authorized Representative <small>MedNet GmbH Birkstrasse 10, 42113 Remscheid, Germany</small> |  European Conformity |  QR Code |  Consults Instructions for use : |  For In Vitro Diagnostic Use |

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

***For Lab Use Only**

