

TRM 361– 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 It is a modification of the original formulation of Rosenow in which the brain tissue has been replaced by brain extract and the calcium carbonate by di-sodium hydrogen phosphate.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 a 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

100 ml 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

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- Selection for vancomycin resistance in clinical isolates of Staphy. haemoliticus: : 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.

***For Lab Use Only**

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