

CM 22522 – BRAIN HEART INFUSION AGAR PLATE

INTENDED USE

For cultivation of fastidious pathogenic bacteria, yeasts and molds.

PRODUCT SUMMARY AND EXPLANATION

BrainHeart Infusion Agar is 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
Agar	15.000
Disodium phosphate	2.500
Proteose peptone	10.000
Dextrose	2.000
Beef heart, infusion from	250.000
Calf brain, infusion from	200.000
Sodium chloride	5.000

PRINCIPLE

Proteose peptone and infusions 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.

INSTRUCTION FOR USE

Either streak, inoculate or surface spread the test inoculum aseptically on the plate.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Light Amber coloured medium
Quantity of Medium	:	25ml of medium in 90mm plates.
pH (at 25°C)	:	7.4 ± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
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<i>Escherichia coli</i>	25922	50-100	luxuriant	>=70%	35-37°C	18-24 Hours
<i>Staphylococcus aureus</i>	25923	50-100	luxuriant	>=70%	35-37°C	18-24 Hours
<i>Shigella flexneri</i>	12022	50-100	luxuriant	>=70%	35-37°C	18-24 Hours
<i>Candida albicans</i>	26790	50-100	luxuriant	>=70%	35-37°C	18-24 Hours
<i>Streptococcus pneumoniae</i>	6303	50-100	luxuriant	>=70%	35-37°C	18-24 Hours

PACKAGING:

Doubledlayered packing containing 5 No. of plates with one silica gel desiccant bag packed inside it.

STORAGE

On receipt,store the plates at 15–30 °C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation.

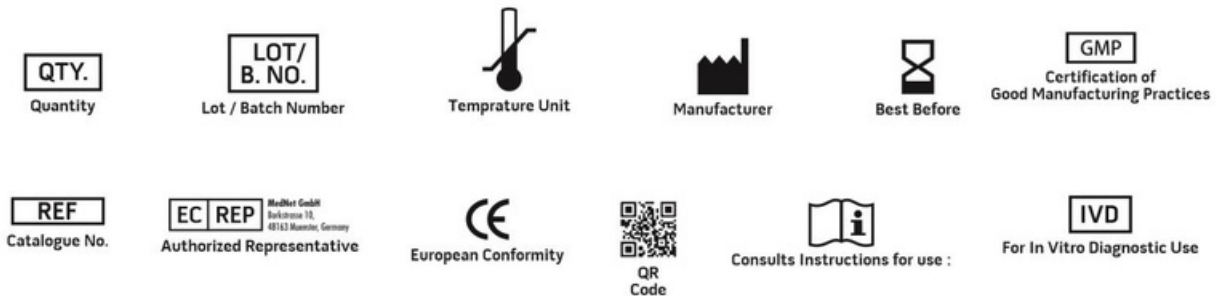
Product Deterioration: Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

DISPOSAL

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

REFERENCES

- Roseburg T. et al, 1944, J. Infect. Dis., 74:131.
- Conant N. F., 1950, Diagnostic Procedures and Reagents, 3rd Ed., APHA Inc.
- MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
- Creitz and Puckett, 1954, Am. J. Clin. Pathol., 24:1318.
- 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.
- 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.



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

