

Technical Information

Brain Heart Infusion With PABA and Agar, MiVeg

Product Code :VM1213

Application:- Brain Heart Infusion with PABA and Agar, MiVeg is used for culturing blood from patients under Sulphonamide therapy. The addition of agar improves growth of anaerobes.

Composition

Ingredients	Gms / Litre
MiVeg special infusion	7.50
MiVeg infusion	10.00
MiVeg peptone	10.00
Sodium chloride	5.00
Dextrose	2.00
Disodium phosphate	2.5
p-Amino benzoic acid (PABA)	0.05
Agar	1.000
Final pH (at 25°C)	7.4±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Brain Heart Infusion with PABA and Agar, MiVeg is prepared by using vegetable peptones instead of animal based peptones, thus the media becomes BSE/TSE risks free. Brain Heart Infusion media are highly nutritious media which can support luxuriant growth of wide variety of microorganisms including bacteria, yeasts and moulds (1) and are often used for isolation of pathogens from clinical specimens especially blood (2). This media is the modifications of Brain Heart Infusion by using vegetable peptones. MiVeg infusion, MiVeg special infusion and MiVeg peptone serve as source of nitrogen, carbon, and vitamins. Dextrose is a source of energy. Disodium phosphate act as a buffering agent. Sodium chloride maintains osmotic equilibrium. PABA is added to neutralize the effects of antimicrobials like Sulphonamides present in blood (inoculum) by competitive inhibition. Incorporation of 0.1% agar in the medium reduces the oxygen tension in the medium and favours growth of facultative and obligatory anaerobic microorganisms.

Methodology

Suspend 38 grams of powder media in 1000 ml purified/distilled water. Mix thoroughly. Heat to boiling the medium completely. Dispense as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Quality Control

Physical Appearance

Yellow coloured, homogeneous, free flowing powder.

Gelling

Semi solid comparable to 0.1% Agar gel.

Colour and Clarity of prepared medium

Light amber coloured, clear to very slightly opalescent semi solid gel forms in tubes as butts.

Reaction

Reaction of 3.8 % w/v aqueous solution pH: 7.4±0.2 at 25°C

pH range

7.2-7.6

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
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<i>Candida albicans</i> (10231)	30-300	good-luxuriant	>70%
<i>Streptococcus pyogenes</i> (19615)	30-300	good-luxuriant	>70%
* <i>Bacteroides fragilis</i> (25285)	30-300	good-luxuriant	>70%
<i>Streptococcus pneumoniae</i> (6303)	30-300	luxuriant	>70%
<i>Neisseria meningitidis</i> (13090)	30-300	luxuriant	>70%

key : * = Incubated anaerobically.

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.

Prepared Media: 2-8° in sealable plastic bags for 2-5 days.

Further Reading

1. MacFaddin J.F., 1985, Media for the Isolation-Cultivation-Identification- Maintenance of Medical Bacteria, Vol.-I, Williams and Wilkins, Baltimore.

2 Murray PR., Baron, Pfaller, Tenover and Tenover (Eds.),

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
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