Technical Information

Tryptose Blood Agar Base with Yeast Extract, MiVeg

Product Code : VM1450

Application:- Tryptose Blood Agar Base with Yeast Extract, MiVeg is used with or without blood for culturing fastidious microorganisms.

Composition**

Ingredients	Gms / Litre
MiVeg hydrolysate No. 1	10.0
MiVeg extract	3.0
Yeast extract	1.0
Sodium chloride	5.0
Agar	15.0
Final pH (at 25°C)	7.3 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Tryptose Blood Agar Base with Yeast Extract, MiVeg is prepared by adding MiVeg hydrolysate No.1 and MiVeg extract in place of Tryptose and Beef extract thereby making the medium BSE/TSE risks free. This medium is the modification of Tryptone Blood agar media as described by Casman (1,2) and recommended by APHA (3). Like conventional medium, this medium is used as a basal medium for preparing blood Agar for the culturing of fastidious bacteria and to determine their haemolytic reactions. Initial use of Dextrose has been discontinued (2) as it interferes with the haemolytic reaction. MiVeg hydrolysate No.1, MiVeg extract and yeast extract supply nitrogenous and carbonaceous compounds, sulphur, vitamin B complex and trace elements necessary for the metabolic activities of the organism.. This medium, not only keeps the blood cells in a good state but also help in formation of distinct haemolytic zones. Tryptose Blood Agar Base with Yeast Extract, MiVeg supports the luxuriant growth of *Neisseria meningitidis* and *Streptococcus pneumoniae*. This medium can be used without the blood supplementation. Biochemical test is necessary for further identification.

Methodology

Suspend 34 grams of powder media in 1000 ml distilled water. Mix thoroughly and heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45°C and aseptically add 5% sterile defibrinated blood. Mix well. Dispense as desired.

Quality Control

Physical Appearance

Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity of prepared medium

Basal medium yields yellow coloured slightly opalescent gel. With addition of 5% v/v defribinated sterile blood cherry red coloured, opaque gel forms in petri plates.

Reaction

Reaction of 3.4% w/v aqueous solution is pH 7.3 ± 0.2 at 25°C.

pH Range

7.1-7.5

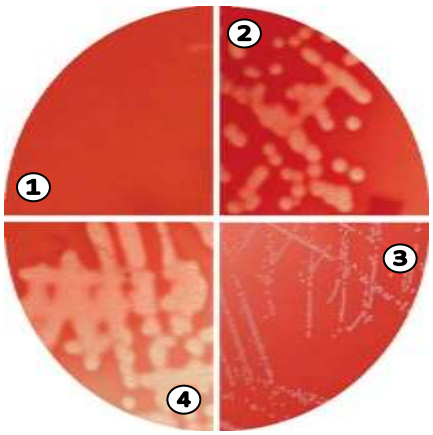
Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 40 - 48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth w/o blood	Growth w/ blood	Recovery w/ blood	Heamolysis
Neisseria meningitidis (13090)	10^2-10^3	luxuriant	luxuriant	>70%	None
Staphylococcus aureus (13090)	10^2-10^3	luxuriant	luxuriant	>70%	Beta
Staphylococcus epidermidis (12228)	10^2-10^3	luxuriant	luxuriant	>70%	Gamma
Streptococcus pneumonia (6303)	10^2-10^3	luxuriant	luxuriant	>70%	Alpha
Streptococcus pyogenes(19615)	10^2-10^3	luxuriant	luxuriant	>70%	Beta

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: 2-8^0 in sealable plastic bags for 2-5 day.



VM 1450 Tryptose Blood Agar Base w/ Yeast Extract, MiVeg

1. Control
2. *Staphylococcus aureus*
3. *Staphylococcus epidermidis*
4. *Streptococcus pyogenes*

Further Reading

1. Casman E.P., 1942, J. Bacteriol., 43:33.
2. Casman E.P., 1947, Am. J. Clin. Path., 17 : 281.
3. American Public Health Association, 1970, Diagnostic Procedures and Reagents, 5th ed. APHA Inc., New York

Disclaimer :

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