

Technical Information

Dextrose Proteose Peptone MiVeg Agar Base

Product Code :VM1734

Application:- Dextrose Proteose Peptone MiVeg Agar is recommended in combination with blood and tellurite for the isolation of *Corynebacterium diphtheriae*.

Composition

Ingredients	Gms / Litre
MiVeg peptone No. 3	20.0
Dextrose	2.0
Sodium chloride	5.0
Agar	15.0
Final pH (at 25°C)	7.4±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Dextrose Proteose Peptone MiVeg Agar Base is prepared by using MiVeg peptone No. 3 in place of proteose peptone thereby making the medium BSE / TSE risks free. This medium is used for the isolation of *Corynebacterium diphtheriae*, when the medium is used in combination with blood and tellurite. Conradi and Troch described a selective serum medium containing tellurite for isolating *Corynebacterium diphtheriae* (1). This medium was modified by different authors in which they used heated Blood Agar Tellurite or Blood Agar Tellurite Arsenate Medium (2, 3, 4). MoGuigan and Frobisher had used a Cystine Tellurite Blood Agar for *Corynebacterium diphtheriae* (5). Without blood and tellurite, this medium is used as a general purpose medium. Incorporation of tellurite and blood, the detection and isolation of *Corynebacterium diphtheriae* is permitted while inhibits *Staphylococci* and *Streptococci*. This medium is like the conventional medium serves the same purpose.

Methodology

Suspend 42 grams of powder media in 1000 ml distilled water. Mix thoroughly. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C. Aseptically add sterile 5% v/v defibrinated blood and sterile 1% Tellurite Solution (MS2052). Mix well before pouring into sterile petriplates.

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

Reddish brown opaque gel forms in petri plates after addition of blood and tellurite solution.

Reaction

Reaction of 4.2 % w/v aqueous solution pH: 7.4 ±0.2 at 25°C

pH range

7.2-7.4

Cultural Response/Characteristics

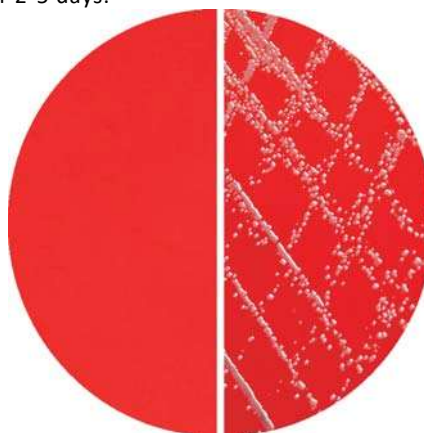
Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Corynebacterium diphtheriae</i> (11913)	10 ² -10 ³	Good-luxuriant	>50%	black
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	inhibited	0%	-
<i>Streptococcus pyogenes</i> (19615)	10 ² -10 ³	inhibited	0%	-

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.



VM1734 Dextrose Proteose Peptone MiVeg Agar Base

1. Control
2. *Corynebacterium diphtheriae*

Further Reading

1. Conradi and Troch, 1912, Muench. Wochschr., 59:1652.
2. Anderson, Happold, McLeod and Thompson, 1931, J. Path. Bact., 34:667.
3. Horgan and Marshall, 1932, J. Hyg., 32:544.
4. Wilson, 1934, J. Path. Bact., 38:114.
5. McGuigan and Frobisher, 1936, J. Infect. Dis., 59:22.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents. Do not use the products if it fails to meet specifications for identity and performance parameters.