Technical Information

C.L.E.D. MiVeg Agar (with Bromo Thymol Blue)

Product Code : VM1792

Application:- C.L.E.D. MiVeg Agar with Bromo Thymol Blue is recommended for isolation, enumeration and identification of urinary pathogens on the basis of lactose fermentation.

Composition

Ingredients	Gms / Litre
MiVeg peptone	4.00
MiVeg hydrolysate	4.00
MiVeg extract	3.00
Lactose	10.00
L-Cystine	0.128
Bromo thymol blue	0.02
Agar	15.00
Final pH (at 25°C)	7.3 ±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

C.L.E.D. MiVeg Agar (with Bromo Thymol Blue) is prepared by using vegetable peptones instead of animal peptones thus the medium becomes free from BSE/TSE risks. This media is the modification of C.L.E.D. Agar as devised by Mackey and Sandy (1). The original experiments and trials to control the swarming of *Proteus* led to formulate C.L.E.D. (Cystine-Lactose-Electrolyte-Deficient) medium which contained L-Cystine promoting growth of coliforms(2). Lactose is serve as an carbon source required for growth of urinary pathogens (1). Bromothymol blue is incorporated to help in identifying lactose fermenting colonies as it is a pH indicator. (2) MiVeg peptone, MiVeg hydrolysate and Miveg extract present in this media supplies necessary nutrient required for luxuriant growth of organism. Appropriate dilutions of urine can be spread on surface of this media toenumerate number of bacteria in urine sample under test (Bacteriuria).

In case of very low pH of urine, around 5.0, a low bacterial count is often reported. This medium does not support growth of *Shigella* species.

Methodology

Suspend 36.15 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.

Quality Control

Physical Appearance

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

Green coloured, very slightly opalescent gel forms in petri plates.

Reaction

Reaction of 3.61 % w/v aqueous solution pH: 7.3±0.2 at 25°C

pH range

7.1-7.5

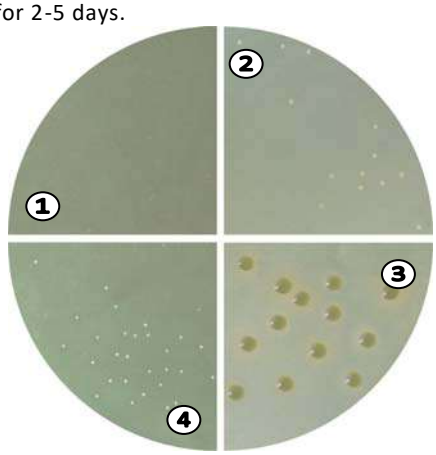
Cultural Response/Characteristics

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

Organism (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
Escherichia coli (25922)	10^2-10^3	luxuriant	>70%	yellow, opaque, center slightly deeper yellow
Klebsiella pneumoniae (13883)	10^2-10^3	luxuriant	>70%	yellow to whitish blue
Proteus vulgaris (13315)	10^2-10^3	luxuriant	>70%	blue
Salmonella serotype Typhi (6539)	10^2-10^3	luxuriant	>70%	bluish
Staphylococcus aureus (25923)	10^2-10^3	luxuriant	>70%	deep yellow
Enterococcus faecalis (29212)	10^2-10^3	luxuriant	>70%	slight yellowish or greenish

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 days.



VM 1792 C.L.E.D. MiVeg Agar (w/ Bromo Thymol Blue)

1. Control
2. *Staphylococcus aureus*
3. *Klebsiella pneumoniae*
4. *Enterococcus faecalis*

Further Reading

1. Mackey and Sandys, 1965, Br. Med. J., 2:1286.
2. MacKey and Sandys, 1966, Br. Med. J., 1:1173.

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 in fingement of any patents.Do not use the products if it fails to meet specificatons for identity and performens parameters.