

Technical Information

Crystal Violet Lactose MiVeg Agar

Product Code : VM1897

Application:- Crystal Violet Lactose MiVeg Agar is used for differentiation of pure cultures of pathogenic and non-pathogenic Staphylococci.

Composition

Ingredients	Gms / Litre
MiVeg peptone No. 3	5.000
MiVeg extract	3.000
Lactose	10.000
Crystal violet	0.0033
Agar	15.000
Final pH (at 25°C)	6.8±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Crystal Violet Lactose MiVeg Agar is prepared by using MiVeg peptone No.3 and MiVeg extract instead of Proteose peptone and Beef extract respectively, thereby making the medium free from BSE/TSE risks. This medium is the modification of medium recommended by Chapman (1) for the differentiation of pure cultures of pathogenic from non pathogenic strains of Staphylococci (2). Crystal Violet is present in the medium inhibits to Staphylococci. A fair growth can be obtained at 1:300,000 concentration of the dye when the medium is inoculated heavily. So this medium is used for study of pure cultures, where a mask inoculation is used rather than for primary isolation. This medium is like the conventional medium on which Staphylococcal colonies show different colours (3).

Methodology

Suspend 33 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 45-50°C. Mix well and pour into sterile Petri plates

Quality Control

Physical Appearance

Light yellow to light tan homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Purple clear to slightly opalescent gel form in petri plates.

Reaction

Reaction of 3.3 % w/v aqueous solution pH: 6.8 ±0.2 at 25°C

pH range

6.60-7.00

Cultural Response/Characteristics

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

Organisms (ATCC)	Growth	Inoculum(CFU)	Recovery	Colour of colony
<i>Escherichia coli</i> ATCC25922	luxuriant	50-100	>=70%	purple
<i>Staphylococcus aureus</i> ATCC 25923	fair - good	50-100	>=30%	yellow



Dehydrated Culture Media
Bases / Media Supplements

<i>Staphylococcus epidermidis</i> ATCC 12228	fair - good	50-100	$\geq 30\%$	purple/slight yellow
<i>Streptococcus pyogenes</i> ATCC 19615	None-poor	50-100	0-10%	colourless

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. Chapman, 1936, J. Bact., 32:199.
2. Chapman, Berens. Peters and Curcio, 1934, J. Bact., 28:343.
3. Chapman and Berens, 1935, J. Bact., 29:437.

Disclaimer :

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