Technical Information

B. C. Motility Test MiVeg Medium

Product Code : VM1906

Application:- B. C. Motility Test MiVeg Medium is used for cultivation and examination of motility of *Bacillus cereus* strains.

Composition

Ingredients	Gms / Litre
MiVeg hydrolysate	10.0
Yeast extract	2.5
Dextrose	5.0
Disodium phosphate	2.5
Agar	3.0
Final pH (at 25°C)	7.4±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

B. C. Motility Test MiVeg Medium is prepared by MiVeg hydrolysate in place of Casein enzymic hydrolysate which makes the medium BSE/TSE risks free. This medium is modification of B.C. Motility Test Medium formulated as per APHA (1) for examination of motility of *Bacillus cereus*.

MiVeg hydrolysate, yeast extract and dextrose present in the medium provides nutrients. Disodium phosphate helps in balancing the pH. Agar content of the medium is crucial for determining motility. 0.3% agar renders medium semisolid in which motile bacteria produce diffused turbidity due to growth, while nonmotile bacteria exhibit a line of growth along the line of inoculation. This medium is inoculated by stabbing down the center with 3 mm loopful of culture and incubated at 18 - 24 hours at 30°C. Rhizoid strains of *Bacillus cereus* var *mycoides* producecharacteristic fuzzy growth due to expansion of thefilamentous growth but they are not motile by means of flagella.

Methodology

Suspend 23 grams of powder media in 1000 ml purified/distilled water. Mix thoroughly. Heat to boiling to dissolve the medium completely. Dispense in 2-3 ml amounts in screw capped tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubes to cool in an upright position.

Quality Control

Physical Appearance

Yellow coloured, may have slightly greenish tinge,homogeneous, free flowing powder.

Gelling

Semisolid, comparable with 0.3% Agar gel.

Colour and Clarity of prepared medium

Yellow coloured, clear to slightly opalescent semi solid gel forms in tubes as butts.

Reaction

Reaction of 2.3 % 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 30°C for 18-24 hours

Organisms (ATCC)	Inoculum (CFU)	Motility
Bacillus anthracis (14578)	luxuriant	-
Bacillus cereus (10876)	luxuriant	+
Bacillus cereus var *mycoides*	luxuriant	-
Bacillus thuringiensis (10792)	luxuriant	+

Key : + = Positive reaction, growth away from stab inoculation
- = Negative reaction, growth along the stab inoculation

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.

Further Reading

1. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.

Disclaimer :

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