

Technical Information

Blood Free Campylobacter Selectivity MiVeg Agar Base

Product Code :VM1887

Application:- Blood Free Campylobacter Selectivity MiVeg Agar Base is a selective isolation and differentiation of *Campylobacter* species.

Composition

Ingredients	Gms / Litre
MiVeg extract	10.0
MiVeg peptone	10.0
MiVeg hydrolysate	3.0
Sodium chloride	5.0
Synthetic detergent No. III	1.0
Ferrous sulphate	0.25
Sodium pyruvate	0.25
Charcoal, bacteriological	4.0
Agar	12.0
Final pH (at 25°C)	7.4±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Blood Free Campylobacter Selectivity MiVeg Agar Base is prepared by using vegetables peptones instead of animal based peptones which makes the medium BSE/TSE risk free. The performance of this medium is equivalent to conventional CCDA-Preston Blood Free Medium cited in APHA (1) for selective isolation of *Campylobacter jejuni*, *Campylobacter coli*, Nalidixic acid resistant, thermophilic *Campylobacter* species and *Campylobacter laridis* from clinical specimens. Blood is replaced by charcoal. Ferrous sulphate and sodium pyruvate enhance aerotolerance of *Campylobacter* species. *Campylobacter* isolation depends on physical factors like antimicrobial agents in the medium, a microaerophilic environment and the incubation temperature. Incubating at 42°C under microaerobic conditions offers maximum growth of *Campylobacter*. Colonies swarms initially when isolated from clinical specimens.

Methodology

Suspend 22.75 grams of powder media in 500 ml purified/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 and aseptically add rehydrated contents of one vial of Campylobacter Supplement V (MS2067). Alternatively to increase the selectivity of the medium, rehydrated contents of one vial of CAT Selective Supplement (MS2145) may be added to 500 ml sterile molten base. Mix well and pour into sterile petri plates.

Quality Control

Physical Appearance

Grey coloured, homogeneous, free flowing powder.

Gelling

Firm, comparable with 1.2% Agar gel.

Colour and Clarity of prepared medium

Black coloured, opaque gel forms in petri plates.

Reaction

Reaction of 4.55 % 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 42°C for 24 - 48 hours on addition of Campylobacter Supplement V (MS2067).

Organisms (ATCC)	Growth	Colour of colony
<i>Campylobacter coli</i> (33559)	good - luxuriant	Creamy grey
<i>Campylobacter jejuni</i> (29428)	good - luxuriant	Grey
<i>Campylobacter laridis</i>	good - luxuriant	Varying type
<i>Escherichia coli</i> (25922)	inhibited	-

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. Vanderzant C. and Splittstoesser D. (Ed.), 1992, Compendium of Methods For Microbiological Examination of Food, 3rd ed., APHA, Washington, D.C.

Disclaimer :

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