

Technical Information

Campylobacter Enrichment MiVeg Broth Base (Preston Enrichment MiVegBroth Base)

Product Code : VM1899

Application:- Campylobacter Enrichment MiVeg Broth Base is selective media, used for the enrichment and cultivation of Campylobacter species.

Composition		
Ingredients	Gms / Litre	
MiVeg peptone	10.0	
MiVeg extract	10.0	
Sodium chloride	5.0	
Final pH (at 25°C)	7.5±0.2	

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Campylobacter Enrichment MiVeg Broth Base is prepared by using MiVeg peptone and MiVeg extract instead of Peptic digest of animal tissue and Beef extract respectively, thereby making the medium free from BSE/TSE risks. This medium is modification of the medium described by Balton and Robertson (1) for the cultivation of *Campylobacter* species and recommended by APHA (2) for enrichment of thermo tolerant *Campylobacter* species from foods.

It contains MiVeg peptone and MiVeg extract which supplies nutrients required for growth. The medium becomes selective for the isolation of *Campylobacter* species after addition of antibiotic supplement. The sample is added to the sterile enrichment broth and may be blended at low speed or stomached and incubated at 42°C for 48 hours in microaerobic condition. Enriched culture maybe further streaked on selective agar for isolation and enumeration. Combination of 5% O (oxygen), 10% CO (carbon dioxide) and 85% N (Nitrogen) atmospheric condition is used. Swarming of colonies may be observed when initially isolated from clinical specimens.

Methodology

Suspend 12.5 grams of powder media in 475 ml distilled water. Mix thoroughly. Heat if necessary to ensure complete solution. Sterilize byautoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to room temperature and aseptically add sterile 25 ml lysed horse blood and reconstituted contents of 1 vial ofCampylobacter Selective Supplement IV (Preston), (MS2042). Mix well and disepense as desired.

Quality Control

Physical Appearance

Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder

Colour and Clarity of prepared medium

Basal medium yields light amber coloured, clear solution without any precipitate. Addition of blood yields cherry red coloured solution

Reaction

Reaction of 2.5 % w/v aqueous solution pH: 7.5 ±0.2 at 25°C

pH range

7.3-7.7





Dehydrated Culture Media Bases / Media Supplements

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 42°C for 48 hours $(5\%0_2 + 10\%$ Carbon dioxide $(CO_2) + 85\%$ N₂) with added Campylobacter Selective Supplement IV (Preston), (MS2042)

Organisms (ATCC)	Growth
Bacillus cereus (10876)	inhibited
Campylobacter coli (33559)	good-luxuriant
Campylobacter jejuni (29428)	good-luxuriant
Campylobacter lari (35221)	good-luxuriant
Escherichia coli (25922)	inhibited
Proteus mirabilis (25933)	inhibited
Staphylococcus aureus (25923)	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. Balton F.J. and Robertson L., 1982, J. Clin. Pathol., 35:462.

2. Vanderzant C. and Splittstoesser D. (Eds.), 1992, Compendium of Methods for the Microbiological Examination of Foods, 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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