

## Preston HiVeg™ Agar Base

MV939

Preston HiVeg Agar Base with added supplement is recommended for selective isolation of thermotolerant *Campylobacter* species.

**Composition \*\* :**

Ingredients	Grams/Litre
HiVeg peptone	10.0
HiVeg extract	10.0
Sodium chloride	5.0
Agar	12.0

Final pH (at 25°C) 7.5 ± 0.2

\*\* Formula adjusted, standardized to suit performance parameters.

**Directions :**

Suspend 18.5 grams in 470 ml distilled water. 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 and aseptically add 25 ml sterile, lysed horse blood and reconstituted contents of Campylobacter Selective Supplement IV (FD042). Mix well and pour plates.

**Principle and Interpretation :**

Preston HiVeg Agar Base is prepared by completely replacing animal based peptones with vegetable peptones that make the medium free of BSE/TSE risks. Preston HiVeg Agar Base is the modification of medium described by Bolton and Robertson (1) for isolation of *Campylobacter* species and is also recommended by APHA (2). Isolation of *Campylobacter* species on selective agar medium is made both with or without selective broth enrichment. Direct plating without enrichment is adequate for fresh faecal samples, or intestinal specimens as high numbers of the organisms may be anticipated. For food samples enrichment is required.

*Campylobacter* species grow well in microaerobic conditions i.e. in 5% O<sub>2</sub> (Oxygen) at 42°C in about 48 hours. Typically on moist media, *C. jejuni* growth swarms, which is a useful diagnostic growth characteristic, however, this type of confluent growth makes it difficult to obtain isolated colonies. Addition of about 4 drops of glycerol to a filter paper kept within the jar/container will hamper confluent and swarming growth of *Campylobacter* (3). The antibiotic supplement renders it selective for *Campylobacter* species.

**Quality Control :****Appearance of powder**

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

**Product Profile :**

Vegetable based (Code MV)☉	Animal based (Code M)
<b>MV939</b> HiVeg peptone HiVeg extract	<b>M939</b> Peptic digest of animal tissue Beef extract

**Recommended for** : Selective isolation of thermotolerant *Campylobacter* species.

**Reconstitution** : 37.0 g/l

**Quantity on preparation (500g)** : 13.51 L

**pH (25°C)** : 7.5 ± 0.2

**Supplement** : Lysed horse blood,  
Campylobacter Selective Supplement IV (FD042)

**Sterilization** : 121°C / 15 minutes.

**Storage** : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

**Gelling**

Firm, comparable with 1.2% Agar gel.

**Colour and Clarity**

Basal medium forms light yellow coloured clear to slightly opalescent gel. With addition of sterile lysed horse blood, chocolate brown coloured opaque gel forms in the petri plates.

**Reaction**

Reaction of 3.7% w/v aqueous solution is pH 7.5 ± 0.2 at 25 °C

**Cultural Response**

Cultural characteristics observed after an incubation at 42°C for 24-48 hours in presence of 5% Oxygen, 10% Carbon dioxide and 85% Nitrogen.

**Organisms (ATCC)**

Organisms (ATCC)	Growth*
<i>Campylobacter coli</i> (33559)	luxuriant
<i>Campylobacter jejuni</i> (29428)	luxuriant
<i>Escherichia coli</i> (25922)	inhibited
<i>Staphylococcus aureus</i> (25923)	inhibited

Key : \* = > With added Campylobacter Selective Supplement IV (FD042).

**References :**

- Bolton F.J. and Robertson L., 1982, J. Clin. Pathol., 35:462.
- Vanderzant C. and Splittstoesser D. (Eds.), 1992, Compendium of Methods for the Microbiological Examination of Foods, 3<sup>rd</sup> ed., APHA, Washington, D.C.
- Stern N.J., 1982, J. Food Safety, 4:169.