TMV 1590 – PRESTON AGAR BASE (VEG.)

INTENDED USE

For selective isolation of thermotolerant *Campylobacter* species.

PRODUCT SUMMARY AND EXPLANATION

Preston Agar Base (Veg) is prepared by completely replacing animal based peptones with vegetable peptones that make the medium free of BSE/TSE risks. Preston Agar Base (Veg) is the modification of medium described by Bolton and Robertson for isolation of *Campylobacter* species and is also recommended by APHA. 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_2 (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.* The antibiotic supplement renders it selective for *Campylobacter* species.

COMPOSITION

Ingredients	Gms / Ltr
Veg peptone	10.000
Veg extract	10.000
Sodium chloride	5.000
Agar	12.000

PRINCIPLE

This medium consists of Veg Peptone and Veg extract which provide nitrogen, vitamins and minerals necessary to support bacterial growth. Sodium chloride provides essential ions.

INSTRUCTION FOR USE

- Dissolve 18.5 grams in 470 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi 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 (Preston Selective Supplement).
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Appearance of prepared medium : 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.

pH (at 25°C) : 7.5 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation (5% O_2 + 10% CO_2 + 85% N_2).

Microorganism	ATCC	Inoculum (CFU/ml)	Growth (With added Campylobacter Selective Supplement IV)	Recovery	Incubation Temperature	Incubation Period
Campylobacter coli	33559	50-100	Luxuriant	>=70%	42°C	24-48 Hours
Campylobacter jejuni	29428	50-100	Luxuriant	>=70%	42°C	24-48 Hours
Escherichia coli	25922	$>10^3$	Inhibited	0%	42°C	24-48 Hours
Staphylococcus aureus	25923	$>10^3$	Inhibited	0%	42°C	24-48 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

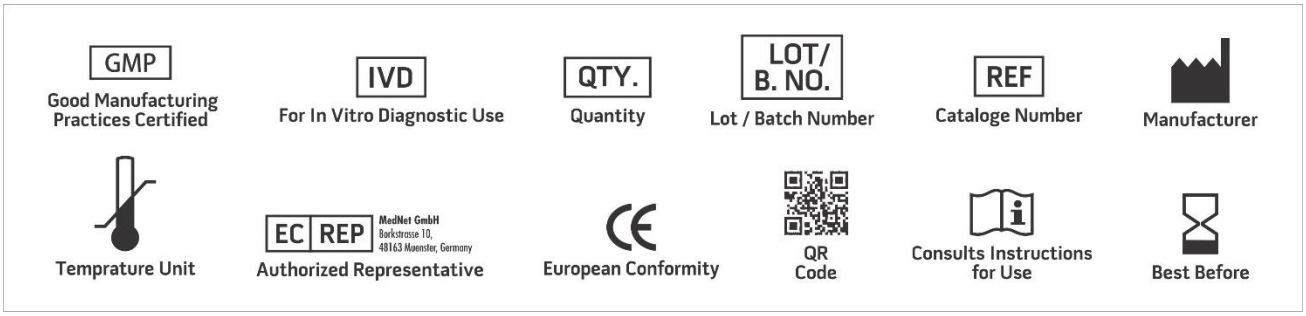
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Bolton 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.
3. Stern N.J., 1982, J. Food Safety, 4:169.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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