

Preston Agar



Medium used for the isolation and cultivation of *Campylobacter* spp. from clinical samples.

*Equally use with MFDS(MB-P0855K) and QIA(MB-P0855Q).

• CONTENTS (Liter)

Beef Extract	10.0 g
Casein Peptone	10.0 g
Sodium Chloride	5.0 g
Agar	12.0 g

Final pH = 7.5 ± 0.2 at 25°C.

• PROCEDURE

Suspend 37.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Aseptically add 2 vials of *Campylobacter* Preston supplement (MB-C1804), *Campylobacter* Growth supplement (FBP) (MB-C1850) and 52.6 mL of Horse Blood Lysed (MB-H1885). Mix well. Dispense in petri dishes.

Campylobacter Preston supplement**

1 vial content (each vial is sufficient for 500mL of medium)

Polymyxin B	2,500 IU
Rifampicin	0.005 g
Trimethoprim	0.005 g
Cycloheximide	0.05 g

**Equally use with MFDS (MB-C1804K).

Campylobacter Growth supplement (FBP)

1 vial content (each vial is sufficient for 500mL of medium)

Sodium Pyruvate	0.125 g
Sodium Metabisulfite	0.125 g
Ferrous Sulfate	0.125 g

• INTERPRETATION

Preston Agar is a selective medium used for the isolation and cultivation of *Campylobacter* spp. from clinical samples. Beef extract and casein peptone provide nitrogen, amino acids, vitamins and minerals necessary to support bacterial growth. Sodium chloride maintains osmotic balance. Agar is the solidifying agent. Sodium pyruvate, sodium metabisulfite and ferrous sulfate are used for the enumeration of *Campylobacter* spp. Polymyxin B, rifampicin and trimethoprim inhibit most gram-negative organisms and many gram-positive organisms. Cycloheximide suppresses fungi.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 42 ± 2°C for 48 - 72 hours under microaerobic condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

Prepared medium

Appearance: opaque

Color: reddish-dark brown

Incubation conditions: 42 ± 2°C / 48 - 72 hours under microaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth
<i>Campylobacter jejuni</i>	33291	50-100	good
<i>Escherichia coli</i>	25922	≥10 ³	inhibited
<i>Staphylococcus aureus</i>	25923	≥10 ³	inhibited

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Bolton, F. J., and L. Robertson. 1982. J. Clin. Microbiol. 35:462-467.
2. Bolton, F. J., D. Coates, P. M. Hinchliffe, and L. Robertson. 1983. J. Clin. Pathol. 36:78-83.
3. Murray, P. R., E. J. Baron, M. A. Pfaller, F. C. Tenover, and R. H. Tenover (eds.). 1995. Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C.

• PACKAGE

Cat. No : MB-P0855 Preston Agar	500 G
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