

Campy Blood Free Agar Modified (MFDS)



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

• CONTENTS (Liter)

Beef Extract	10.0 g
Yeast Extract	2.0 g
Peptone	10.0 g
Sodium Chloride	5.0 g
Charcoal	4.0 g
Casein Peptone	3.0 g
Sodium Deoxycholate	1.0 g
Ferrous Sulfate	0.25 g
Sodium Pyruvate	0.25 g
Agar	12.0 g

Final pH = 7.4 ± 0.2 at 25°C.

• PROCEDURE

Suspend 47.5 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 Campy Blood Free Agar Modified supplement(MB-C0722). Mix well. Dispense into petri dishes.

Campy Blood Free Agar Modified supplement

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

Sodium Cefoperazone	0.016 g
Rifampicin	0.0025 g
Amphotericin B	0.001 g

• INTERPRETATION

Campy Blood Free Agar Modified (MFDS) is a medium used for the isolation and cultivation of *Campylobacter* spp. from clinical samples. Beef extract, yeast extract, peptone and casein peptone provide nitrogen, carbon, vitamins and minerals. Sodium chloride maintains the osmotic balance. Charcoal and ferrous sulfate promote the growth of *Campylobacter* spp. Sodium deoxycholate inhibits the growth of gram-positive bacteria. Sodium pyruvate is used for the enumeration of *Campylobacter* spp. Agar is the solidifying agent. Sodium cefoperazone and rifampicin inhibit gram negative enteric bacilli and some gram positive microorganisms. Amphotericin B 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 conditions. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: dark gray

Prepared medium

Appearance: opaque with a precipitate

Color: black

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

• 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 D. N. Hutchinson. 1984. J. Clin. Pathol. 34:956-957. 4.
2. Bolton, F. J., D. N. Hutchinson, and G. Parker. 1988. Eur. J. Clin. Microbiol. Infect Dis. 7:155-160. 5.
3. Vanderzant, C., and D. F. Splittstoesser (eds.). 1992. Compendium of methods for the microbiological examination of food, 3rd ed. American Public Health Association, Washington, D.C
4. Refer to the MFDS.

• PACKAGE

Cat. No : MB-C1070K Campy Blood Free Agar Modified (MFDS)	500 G
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