

# CPC (Cellobiose-Polymyxin B-Colistin) Agar Modified



Medium used for the isolation and cultivation of *Vibrio* species from foods.

\*Equally use with MFDS.

## • CONTENTS (Liter)

Peptone	10.0 g
Beef Extract	5.0 g
Sodium Chloride	20.0 g
Bromothymol Blue	0.04 g
Cresol Red	0.04 g
Agar	15.0 g
Final pH = 7.6 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 50.08 G of powder in 900 mL 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 CPC Agar Modified supplement (MB-C0814) or 2 vials of CC Agar supplement (MB-C0817). Mix well. Pour into petri dishes.

### CPC Agar Modified supplement

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

Cellobiose	5.0 g
Polymyxin B	50,000 IU
Colistin	200,000 IU

### CC Agar supplement

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

Cellobiose	5.0 g
Colistin	200,000 IU

## • INTERPRETATION

CPC (Cellobiose-Polymyxin B-Colistin) Agar Modified is a medium used for the isolation and cultivation of *Vibrio* species from foods. CPC (Cellobiose-Polymyxin B-Colistin) Agar Modified contains peptone and beef extract which supply the essential nitrogenous compounds to the grow *Vibrio* species. Sodium chloride maintains the osmotic balance. Cellobiose is fermented by some *Vibrios* producing acid and is indicated by the pH indicator bromothymol blue, which turns yellow at acidic pH. Cresol red is the pH indicator of alkaline range, which turns red at alkaline pH. Agar is the solidifying agent. Polymyxin B and colistin serve as selective agents.

## • TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 40 ± 2°C for 18 - 24 hours (MFDS: 35 - 37°C for 18 - 24 hours). Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige to light brown

### Prepared medium

Appearance : clear to slightly opalescent

Color: olive-green

Incubation conditions: 40 ± 2°C / 18 - 24 hours

(MFDS: 35 - 37°C / 18 - 24 hours)

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Vibrio cholerae</i>	14035	10 <sup>5</sup>	good	green-purple
<i>Vibrio vulnificus</i>	27562	10 <sup>5</sup>	good	yellow
<i>Vibrio parahaemolyticus</i>	17802	≥10 <sup>3</sup>	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. Store prepared medium at 2 - 8°C.

## • REFERENCES

1. Massad, George, and James D. Oliver. "New selective and differential medium for *Vibrio cholerae* and *Vibrio vulnificus*." Applied and environmental microbiology 53.9 (1987): 2262-2264.
2. Refer to the MFDS.

## • PACKAGE

Cat. No : MB-C0808 CPC (Cellobiose-Polymyxin B-Colistin) Agar Modified	500 G
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