CPC (Cellobiose-Polymyxin B-Colistin) Agar

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

• CONTENTS (Liter)

Peptic Digest of Animal Tissue	10.0 g
Beef Extract	5.0 g
Cellobiose	15.0 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 65.08 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 CPC Agar supplement (MB-C0815). Mix well. Pour into petri dishes.

CPC Agar supplement

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

Polymyxin B	50,000 IU
Colistin	680,000 IU

• INTERPRETATION

CPC (Cellobiose-Polymyxin B-Colistin) Agar is a medium used for the isolation and identification of Vibrio species from foods. CPC (Cellobiose-Polymyxin B-Colistin) Agar contains peptic digest of animal tissue and beef extract which supply the essential nitrogenous compounds to the grow Vibrio species. Cellobiose is fermented by some Vibrios producing acid and is indicated by the pH indicator bromothymol blue, which turns yellow at acidic pH. Sodium chloride maintains the osmotic balance. 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 specimen to the Alkaline Peptone Water (MB-A1098) or Alkaline Peptone Water (MFDS) (MB-A1098K). Incubate at 35 - 37°C for 18 - 24 hours up to 48 hours. Inoculate the cultures using a sterile loop to the CPC (Cellobiose-Polymyxin B-Colistin) Agar. Incubate at 35 - 37°C for 18 - 24 hours. If necessary, incubate at 40 ± 2°C for 18 - 24 hours to improve the selectivity. 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: 35 - 37°C / 18 - 24 hours (If necessary, 40 ± 2°C / 18 - 24 hours)

Microorganism	ATCC	Growth	Characteristics
Vibrio cholerae	NCCP 14552	good	green-purple
Vibrio vulnificus	27562	good	yellow
Vibrio parahaemolyticus	17802	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.

• PACKAGE

Cat. No : MB-C0809 CPC (Cellobiose-Polymyxin B-Colistin) Agar	500 G