

Product Data Sheet

CAMPYLOBACTER CEFEX AGAR BASE

Product No. GB-DCM-00154-1A

INTENDED USE

For isolation and cultivation of Campylobacter species.

Product Description

Campylobacter species were associated with variety of veterinary diseases and also has been characterized as bacterial agents of human foodborne gastroenteritis. The organisms may also be transmitted by contaminated food or water. Campylobacter Cefex Agar Base is used for isolation and cultivation of Campylobacter species. Campylobacter Agar with antimicrobial and 50 ml sheep blood is recommended as a selective medium for the primary isolation and cultivation of Campylobacter species. Campylobacter Cefex Agar Base is a highly nutritious base and the addition of horse blood supplements the medium with X-factor and other growth factor requirements. The addition of antimicrobials to the medium is required to suppress the growth of normal flora. Cefoperazone is added to inhibit many gram-positive and gram-negative organisms (Aerobic and anaerobic). Cycloheximide is added to inhibit the growth of contaminating fungi. Campylobacter Cefex Agar Base can be used for direct inoculation or indirect inoculation. After inoculation, incubate the plates at 42°C for 48-72 hours in microaerophilic atmosphere. In addition, media may be set up in duplicate with the second set incubated at 35-37°C to allow for the growth of certain Campylobacter species. Campylobacter jejuni colony morphology may appear as small mucoid, grayish flat colonies with irregular edges and no hemolytic patterns after 24-48 hours. Colonies may also appear pink or yellowish gray with some colonies exhibiting a tailing effect along the streak line. They may also appear as round, convex, entire, glistening, 1-2 mm in diameter. Cephalothin-sensitive Campylobacter species such as C.fetus and C.upsaliensis may not be recovered on Campylobacter Cefex Agar Base because it contains Cefoperazone. These agents in selective media may inhibit some strains of desired species. Therefore, specimens cultured on selective media should also be cultured on non-selective media to obtain additional information and to ensure recovery of potential pathogens.

STRUCTION FOR USE

- Dissolve 49.35 grams in 950 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.
- Aseptically add 10% defibrinated sheep blood or 5-7% v/v laked horse blood and rehydrated contents of one vial of Park and Sanders Selective Supplement II.
- Mix well and pour into sterile Petri plates.

Product Specifications

Ingredients	Gms / Ltr
Tryptone	15.000
Peptone	10.000
Sodium chloride	5.000
Yeast extract	2.000
Dextrose (Glucose)	1.000
Ferrous sulphate	0.500
Sodium pyruvate	0.500
Sodium bisulphite	0.350
Agar	20.000

PRINCIPLE

Tryptone, Peptone and yeast extract provide nitrogenous compounds, carbon, sulphur, vitamins and trace ingredients. Glucose is utilized as an energy source. Sheep blood supplies the X-factor (heme) and other growth requirements. Incorporation of antibiotics suppresses the growth of the normal microbial flora in the specimens thereby facilitating isolation of *Campylobacter* species.

Microorganism	ATCC	Inoculum (CFU)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Campylobacter jejuni</i>	29428	50-100	Good-luxuriant	≥50%	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	None-poor	0-10%	35-37°C	18-24 Hours
<i>Enterococcus faecalis</i>	29212	50-100	None-poor	0-10%	35-37°C	18-24 Hours



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.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder:	Cream to yellow homogeneous free flowing powder
Appearance of prepared medium	Basal medium: Yellow coloured clear gel After addition of 5-7% v/v lysed blood: Reddish brown coloured opaque gel forms in Petri plates.
PH (at 25°C):	7.0±0.2

DISPOSAL

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

This product is for research use only.