

Product Data Sheet

CAMPYLOBACTER CEFEX BROTH BASE

Product No. GB-DCM-00156-1A

INTENDED USE

For selective isolation of Campylobacter species from faecal samples, foods and environment.

Product Description

Campylobacter Cefex broth base is used for isolation and cultivation of Campylobacter species. Campylobacter is a Gram negative, motile, microaerophilic and spiral group of bacteria. The bacterium has a characteristic corkscrew (spiral) appearance and hence it is named as Campylobacter (twisted bacteria). Campylobacter jejuni is recognized as a most prevalent food borne pathogen. The infection occurs due to the consumption of undercooked or contaminated food products, especially poultry products. Campylobacter fetus can cause spontaneous abortions in cattle and sheep and also act as opportunistic pathogen in humans.

Product Specifications

| Ingredients | Gms / Ltr |
|--------------------------------|-----------|
| Casein enzymatic hydrolysate | 15.000 |
| Peptic digest of animal tissue | 10.000 |
| Sodium chloride | 5.000 |
| Yeast extract | 2.000 |
| Glucose | 1.000 |
| Ferrous sulphate | 0.500 |
| Sodium pyruvate | 0.500 |
| Sodium bisulphite | 0.350 |

PRINCIPLE

Casein hydrolysate, peptic digest of animal tissue 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 (home) and other growth requirements. Incorporation of antibiotics suppresses the growth of the normal microbial flora in the specimens thereby facilitating isolation of Campylobacter species. The addition of antimicrobials to the medium is required to suppress the growth of normal flora. Cefoperazone is added to inhibit many grampositive 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.

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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.

| Microorganism | ATCC | Inoculum (CFU) | Growth | Recovery | Incubation Temperature | Incubation Period |
|--------------------------|-------|-------------------|--------------------|----------|---------------------------|----------------------|
| Campylobacter jejuni | 29428 | 50-100 | Good- luxuriant | >=50% | 35-37°C | 18-24 Hours |
| Escherichia coli | 25922 | 50-100 | None-poor | 0-10% | 35-37°C | 18-24 Hours |
| Enterococcus faecalis | 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: | Yellow coloured clear to slightly opalescent gel. After |
| | addition of blood: Cherry red 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.

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