

## TM 1145 – BLOOD FREE CAMPYLOBACTER BROTH BASE

### INTENDED USE

For selective isolation of *Campylobacter species*.

### PRODUCT SUMMARY AND EXPLANATION

*Campylobacter*'s are carried in the intestinal tract of animal and therefore contaminate foods of animal origin. *Campylobacter* causes intestinal upset or abortion in animals. It is also one of the most important causes of human gastroenteritis, particularly in children. Initially blood was used in the isolation of *Campylobacter*. But, later it was reported by Bolton et al that charcoal could be effectively used in place of blood. This rules out the variability obtained due to the use of blood. Blood Free *Campylobacter* Broth Base is used for selective isolation of *Campylobacter* species. *Campylobacter* species are highly resistant to cefoperazone, an antibiotic which effectively suppresses growth of *Pseudomonas* and *Enterobacteriaceae*. Addition of cefoperazone increases the selectivity of the medium. Due to this addition, the medium is also known as *Campylobacter* Charcoal Differential Agar (CCDA). Charcoal, sodium pyruvate and ferrous sulphate reduces the aero tolerance of medium by quenching photo chemically generated toxic oxygen derivatives.

### COMPOSITION

Ingredients	Gms / Ltr
Peptone	10.000
Beef extract	10.000
Tryptone	3.000
Sodium chloride	5.000
Sodium deoxycholate	1.000
Ferrous sulphate	0.250
Sodium pyruvate	0.250
Charcoal, bacteriological	4.000

### PRINCIPLE

Peptone, tryptone and beef extract serve as sources of essential nutrients and amino acids. Casein is added to help grow certain strains of nalidixic acid resistant thermophilic *Campylobacter* from environmental samples. Amphotericin B suppresses the growth of yeast and mold contaminants.

### INSTRUCTION FOR USE

- Dissolve 16.75 grams in 500 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add rehydrated contents of 1 vial of CCDA Selective Supplement.
- Mix well and dispense into sterile tubes.

### QUALITY CONTROL SPECIFICATIONS



**Appearance of Powder** : Grey to black homogeneous free flowing powder.  
**Appearance of prepared medium** : Black coloured opaque solution in tubes.  
**pH (at 25°C)** : 7.4±0.2

### INTERPRETATION

Cultural characteristics observed after incubation with added 1 vial of CCDA Selective Supplement.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Campylobacter coli</i>	33559	50-100	Good-luxuriant	30°C	72 Hours
<i>Campylobacter jejuni</i>	29428	50-100	Good-luxuriant	30°C	72 Hours
<i>Campylobacter laridis</i>	35222	50-100	Good-luxuriant	30°C	72 Hours
<i>Escherichia coli</i>	25922	>=10 <sup>4</sup>	Inhibited	30°C	72 Hours

### PACKAGING:

In pack size of 500 gm bottles.

### 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.













### DISPOSAL

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

### REFERENCES

- Ahonkai V. I., et al, 1981, Antimicrob. Agents. Chemother.,20:850.
- Bolton F. J., Hutchinson D. N and Coates D., 1984, J. Clin. Microbiol., 19:169.
- Jones R. N., et al, 1980, Antimicrob. Agents. Chemother.,17:743.
- Koneman E. W., Allen S. D., Janda W. M., Schreckenberger P. C., Winn W. C. Jr., 1992, Colour Atlas and Textbook of Diagnostic Microbiology, 4th Ed., J. B. Lippincott Company.
- Karmali M. A., et al, 1986, J. Clin. Microbiol., 23:456.
- Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Cataloge Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Borkstrasse 10, 48163 Moenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
**Revision: 08 Nov., 2019**