

Preston Broth

Selective liquid medium for detection of *Campylobacter* spp, according to ISO 10272.

TYPICAL FORMULA* (Per litre of Purified Water)

Enzymatic Digest of Animal Tissues	10.0 g
Peptone	10.0 g
Sodium Chloride	5.0 g
Lysed Horse Blood	50.0 ml
Polymyxin B Sulfate	5 000 IU
Rifampicin	0.01 g
Trimethoprim Lactate Salt	0.01 g
Amphotericin B	0.01 g
Final pH 7.4 ± 0.2 at 25°C	

*Formula may be adjusted and/or supplemented as required to meet performance specifications

DESCRIPTION

Preston Broth is a liquid medium used for the selective enrichment of *Campylobacter* spp in food, animal feed and environmental samples.

This medium conforms to ISO 10272-1:2017 and is used in conjunction with modified Charcoal Cefoperazone Deoxycholate (mCCD) agar. Preston Broth has been included in the detection method as an alternative option to overcome problems with background flora resistant to third generation β -lactams, like cefoperazone in Bolton broth.

PRINCIPLE

Enzymatic digest of animal tissues and peptone provide amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Sodium chloride maintains the osmotic balance of the medium. Lysed horse blood provides essential growth factors. Polymyxin B, rifampicin, trimethoprim and amphotericin B are selective agents.

TECHNIQUE

To prepare the initial suspension, add a test portion to Preston Broth in order to obtain a 1 in 10 dilution, and homogenize.

Incubate at 41.5°C for 24 ± 2 h in microaerobic atmosphere.

INTERPRETATION OF RESULTS

Using a loop, take 10 μ l the enrichment culture and streak onto a plate of mCCD (ref. 10409). For the continuation of the detection procedure, refer to the instructions of the mCCD agar.

STORAGE

Store at 2-8°C away from light, until the expiry date on the label. Eliminate if signs of deterioration or contamination are evident.

WARNING AND PRECAUTIONS

For professional use only. Operators must be trained and have certain experience in the laboratory methods. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES

1. EN ISO 11133:2014+Amd1:2018. Microbiology of food, animal feed and water – Preparation, production, storage and performance testing of culture media.
2. ISO 10272-1:2017. Microbiology of the food chain – Horizontal method for the detection and enumeration of *Campylobacter* spp. – Part 1: Detection method.
3. Bolton, F. J., D. Coates, P. M. Hinchliffe, and L. Robertson (1983) J. Clin. Pathol. 36:78-83.



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PRODUCT SPECIFICATIONS

NAME

Preston Broth

STORAGE

2-8°C

pH OF THE MEDIUM

7.4 ± 0.2

USE

Preston Broth is a liquid medium used for the detection of *Campylobacter* spp from food and environmental samples

SHELFLIFE

1 year

QUALITY CONTROL

Appearance of Medium: Clear, light amber

Expected Cultural Response

Inoculum for productivity: ≤100 CFU

Inoculum for selectivity: ≥10⁴ CFU








Incubation: 24 ± 2 h / 41.5 ± 1°C in microaerobic atmosphere

Control strains		Specification
<i>Campylobacter jejuni</i> + <i>Escherichia coli</i>	WDCM 00156 WDCM 00012	>10 characteristic colonies on mCCD agar
<i>Escherichia coli</i>	WDCM 00012	Total inhibition on TSA

PACKAGING

Ref. 414160 6 x 90 ml bottles

TABLE OF SYMBOLS

LOT Batch code	 Do not reuse	 Manufacturer	 Use by	 Fragile, handle with care
REF Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult instruction for use	



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