



Reference : 02-561

Scharlau Microbiology - Technical data sheet

Product :
Preston *Campylobacter* Broth Base (Nutrient N.2 Broth)

Also known as

Nutrient Broth no. 2

Specification

Liquid medium for general use, with a high concentration of nutrients.

Formula * in g/L

Casein Peptone..... 10.00

Meat Peptone..... 10.00

Sodium chloride..... 5.00

Final pH 7.4 ±0,2 at 25 °C

* Adjusted and /or supplemented as required to meet performance criteria

Directions

Dissolve 25 g of powder in 1 L of distilled water and bring to the boil. Distribute in suitable containers and sterilize in an autoclave for 15 minutes at 121°C. To formulate Preston Broth for the Selective Enrichment of *Campylobacter*, cool to 45-50°C and add to each 500 mL of medium base: a) Lysed Blood in a proportion of 5-7% (v/v), b) A vial of Growth Supplement for *Campylobacter* (Art. No. 06-128LYO1) and c) A vial of Selective Supplement of *Campylobacter* according to Preston (Art. No. 06-130LYO1) or a vial of Modified Selective Supplement for *Campylobacter* according to Preston (Art. No. 06-135LYO1). Mix carefully and distribute in bottles or tubes with a threaded cap, ensuring that the space between the liquid and the top is the minimum possible to maintain microaerophilic conditions.



Reference : 02-561

Scharlau Microbiology - Technical data sheet

Product :
Preston *Campylobacter* Broth Base (Nutrient N.2 Broth)

Description

Nutrient Broth no. 2 is particularly rich in nutrients, allowing the growth of very small inoculates of certain fastidious microorganisms. Its formulation corresponds to the British Norm (formulation) for the determination of the Coefficient of Rideal-Walker in disinfectants, although in the latter it is used in double concentration. This medium supplemented with blood, antibiotics and reducing agents is used as a selective enrichment broth in the detection and isolation of *Campylobacter* from very contaminated samples.

Necessary supplements

Campylobacter Growth Supplement (Art. No. 06-128LYO1)

Vial Contents:

Necessary amount for 500 mL of complete medium.

Sodium pyruvate 0,125 g

Sodium metabisulfite 0,125 g

Ferrous sulfate 0,125 g

Distilled water (Solvent)

Campylobacter Preston Selective Supplement (Art. No. 06-130LYO1)

Vial Contents:

Necessary amount for 500 mL of complete medium.

Polymyxin B sulfate 2500,00 IU

Rifampicin 5,00 mg

Trimethoprim 5,00 mg

Cycloheximide 50,00 mg

Distilled water (Solvent)

Campylobacter Preston Modified Selective Supplement (Art. No. 06-135LYO1)

Vial Contents:

Necessary amount for 500 mL of complete medium.

Polymyxin B sulfate 2500,00 IU

Rifampicin 5,00 mg

Trimethoprim 5,00 mg

Amphotericin B sulfate 5,00 mg

Distilled water (Solvent)

Quality control

Incubation temperature: 41,5 ± 1°C

Incubation time: 44 ± 4h

Inoculum: Practical range 100 ± 20 CFU. Min. 50 CFU (Productivity) / 10⁴-10⁶ CFU (Selectivity) according to ISO 11133:2014/Amd 1:2018 .

Microorganism

Campylobacter jejuni ATCC® 29428

Campylobacter coli ATCC® 43478

Escherichia coli ATCC® 8739

Proteus mirabilis ATCC® 29906

C. jejuni ATCC® 29428 + *E. coli* + *Pr. mirabilis*
mCCDA

Growth

Good

Good

Partial Inhibition

Total inhibition

Remarks

Under microaerophilic atmosphere

Under microaerophilic atmosphere

w. supplements

w. supplements

Good (qualitative) Recovery > 10 FCU in



Reference : 02-561

Scharlau Microbiology - Technical data sheet

Product :

Preston *Campylobacter* Broth Base (Nutrient N.2 Broth)

References

- BOLTON, F.J. & L. ROBERTSON (1982) A selective medium for isolating *Campylobacter jejuni/coli* J. Clin. Pathol. 35:462-467.
- BOLTON, F.J., D. COATES, P.M. HINCHLIFFE & L. ROBERTSON (1983) Comparative of selective media for isolation of *Campylobacter jejuni/ coli* J. Clin. Pathol. 36:78-83.
- CORRY, J.E.L., H.I. ATABAY, S.J. FORSYTHE & L.P. MANSFIELD (2003) Culture Media for the Isolation of *Campylobacters*, *Helicobacters* and *Arcobacters*, en Corry et al. (Eds) Handbook of Culture Media for Food Microbiology Chap 18 pgs 271-316. Elsevier Science B.V. Amsterdam.
- ISO 6340 Standard (1995) Water Quality - Detection of *Salmonella* species.
- ISO 10272-1 Standard (2017) Microbiology of the food chain - Horizontal Method for detection and enumeration of *Campylobacter* spp. - Part 1: Detection method.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).