BPRM BROTH BASE (Bacteorides Phage Recovery Medium) ISO 10705:4

CAT Nº: 1451

For the cultivation of *Bacteroides fragilis* and for phage recovery from environmental samples

FORMULA IN g/l

Peptone	10.00	Glucose	1.80
Tryptone	10.00	L-Cysteine	0.50
Sodium Chloride	5.00	Magnesium Sulfate Heptahydrate	0.12
Yeast Extract	2.00		

Final pH 6.8 ± 0.2 at 25ºC

PREPARATION

Suspend 29.42 grams of the medium in one liter of distilled water. Add 1ml of Calcium Chloride Dihydrate $CaCl_2$ X H_2O 5%. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize at 121°C for 15 minutes. Cool to 45-50ºC. Aseptically add 1ml/litre of 1% hemin sterile solution prepared in 0.02% NaOH. Mix well. Just before use add 25 ml/litre of a sterile solution of 10.6% (w/v) Disodium carbonate. Adjust the pH to 7.0 with HCl. The prepared medium should be stored at 2-8°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

USES

BPRM Broth Base (Bacteroides Phage Recovery Medium) is a medium recommended by ~~the~~ ISO normative 10705-4 for the cultivation of *Bacteroides fragilis* and for the recuperation of phage from human faecal samples and environmental samples. Bacteroides Phage Recovery Medium in the culture of phages affecting *B. fragilis* allows faster bacterial growth and produces higher phage yields.

With the adequate concentration of agar you can prepare a semi-solid or solid medium. To inhibit the accompanying flora, add 100 mg/ml of Kanamycin and 7.5 mg/ml of Vancomycin sterilized by filtration.

Incubate at 35-37ºC and observe after 48 hours under 5-10% CO_2 conditions.

Bacteroides fragilis is a Gram negative bacteria, an obligate anaerobe and one of the most abundant bacteria in the human colon. It causes 90% of the anaerobic peritoneum infections.

MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 35-37ºC under 5-10% CO_2 conditions and observed after 48 hours.

Microorganisms	Growth
Bacteroides fragilis ATCC 25285	Good

BIBLIOGRAPHY

ISO 10705-4 Water quality -Detection and enumeration of bacteriophages - Part 4: Enumeration of bacteriophages infecting *Bacteroides fragilis*

Donia D., Divizia M., Pana' A. Analysis of concentration methods for bacteriophages. *Moderna*, 1998, 109: 1.

Tartera C., Jofre J. Bacteriophages active against *Bacteroides fragilis* in sewage-polluted waters. *Applied and Environmental Microbiology*, 1987, 53, 1632

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STORAGE

Once opened keep powdered medium closed to avoid hydration.