

FASTIDIOUS ORGANISM BROTH

- For in vitro use only -

Catalogue No. TF25

Our Fastidious Organism Broth is a general, non-selective broth used for the enrichment of a wide variety of fastidious organisms including *Haemophilus* and *Neisseria* species.

Our formulation is based on the work of Cartwright, Stock and Gill whom reported the development of a superior fastidious broth as compared to other mediums being used at that time. Our formulation contains minor improvements in the peptones and growth factors, which allows for the growth of organisms with diverse nutritional and atmospheric requirements including *Haemophilus influenzae* and *Neisseria gonorrhoeae* species.

Formula per Litre of Medium

Brain Heart Infusion	6.0 g
Peptic Digest of Animal Tissue	6.0 g
Pancreatic Digest of Gelatin	14.5 g
Yeast Extract	5.0 g
Sodium Chloride	5.0 g
Dextrose	3.0 g
Hematin	0.015 g
Growth Factors	10.0 mL

pH 7.4 ± 0.2

Recommended Procedure

- 1. Allow medium to adjust to room temperature prior to inoculation. If desired, the medium can be pre-reduced by placing the tubes in an enriched CO₂ environment.
- 2. Inoculate broth with specimen of interest or an inoculum from pure culture.
- 3. Incubate tubes with loose caps at 35°C in a 5% CO₂-enriched environment.
- 4. Examine broth after 48 hours. If the broth is turbid subculture broth onto an appropriate solid medium such as chocolate agar for

further characterization and testing. If no growth is observed re-incubate tubes an additional 48 hours before discarding.

Interpretation of Results

As indicated our Fastidious Organism Broth is a non-selective medium which will allow most organisms to grow and flourish. A positive test is any turbidity observed in the broth after the incubation period. The broth must be sub-cultured onto a solid medium so that additional biochemical and/or serological tests can be performed on isolated colonies from pure culture in order to complete identification.

Quality Control

After checking for correct pH, colour, depth, and sterility, the following organisms are used to determine the growth performance of the completed medium.

Organism	Expected Result
Haemophilus influenzae ATCC 10211	Growth (Turbidity)
Neisseria gonorrhoeae ATCC 43070	Growth (Turbidity)
Streptococcus pneumoniae ATCC 6305	Growth (Turbidity)

Storage and Shelf Life

Our Fastidious Organism Broth should be stored away from direct light at 4 to 8°C. Under these conditions this medium has a shelf life of 14 weeks from the date of manufacture.

References

- 1. Rosenow. J Dent 1919; 1:205.
- 2. Cartwright CP, Stock F, Gill VJ. Improved enrichment broth for cultivation of fastidious organisms. J Clin Micro 1994; 32:1825-6.
- 3. Murray PR et al. Manual of Clinical Microbiology, 6th ed. American Society for Microbiology: Washington, D.C, 1995.
- 4. MacFaddin, JF. Biochemical tests for the identification of medical bacteria. 3rd ed. Philadelphia: Lippincott Williams & Wilkins, 2000.

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