Beef Extract Broth

M807

Beef Extract Broth is used as a general purpose nutrient medium which can support growth of not particularly fastidious bacteria.

Composition**

Ingredients	Gms / Litre
Peptic digest of animal tissue	10.000
Beef extract	3.000
Sodium chloride	5.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 18 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense broth in tubes in 10 ml amount. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

The majority of organisms to be studied in medical bacteriology are either pathogens or commensals of the human body, and in order to obtain suitable growth the artificial culture medium should provide nutrients and a pH (about 7.2) approximating to those of the tissues and body fluids. For routine purposes many of these nutrients are supplied by aqueous extracts of beef and peptone, which is a product of the digestion of protein (1).

Beef Extract Broth can be used as a general-purpose nutrient medium and is also recommended for preparation of pure culture of *Candida* species for carrying out fermentation studies (2).

Beef Extract Broth is a non-selective nutrient medium containing beef extract and peptic digest of animal tissue as a source of nitrogen and carbon and sodium chloride as a source of electrolytes.

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium
Yellow coloured, clear solution without any haziness in tubes

Reaction
Reaction of 1.8% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH
7.00-7.40

Cultural Response
M807: Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

Organism	Inoculum (CFU)	Growth
Candida albicans ATCC 10231	50-100	luxuriant
Escherichia coli ATCC 25922	50-100	luxuriant
Pseudomonas aeruginosa ATCC 27853	50-100	luxuriant
Salmonella Typhi ATCC 6539	50-100	luxuriant
Staphylococcus aureus ATCC 25923	50-100	luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

Reference

1. Collee J. G., Fraser A. G., Marimon B. P., Simmons A., (Eds.) ,1996, Mackie and McCartney Practical Medical Microbiology, 14th Ed., Churchill Livingstone.
2. Finegold S. M. and Baron E. J., (Ed.), Bailey and Scott's Diagnostic Microbiology, 1986, 7th Edition, The C.V. Mosby Company, St. Louis.

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