

TRYPTIC SOY BROTH

With 20% GLYCEROL

PRODUCT:**Tube Media:**

Tryptic Soy Broth With 20% Glycerol, item no. T7732 (tube), B5720 (bottle)

PURPOSE:

Tryptic soy is a general-purpose base medium that is used for the cultivation of fastidious microorganisms. It is a soybean-casein digest medium, and with the addition of the cryoprotective agent, glycerol, the medium can be used for the long-term maintenance of frozen bacterial stock cultures.

PRINCIPLE:

Tryptic soy is a highly nutritious medium and is commonly used as a base medium for the cultivation of microorganisms. The addition of glycerol provides intracellular and extracellular protection against freezing.

FORMULA:

Approximate, per 800 ml of deionized filtered water.

Pancreatic Digest of Casein	17.0 g
Enzymatic Soy Digest	3.0
Dextrose	2.5
Sodium Chloride	5.0
Dipotassium Phosphate	2.5
Glycerol	200.0 ml
Final pH 7.3 ± 0.2 at 25°C	

PRECAUTIONS:*

For in vitro diagnostic use. Observe approved biohazard precautions.

Storage: Upon receipt store at 2-8°C away from direct light. Media should not be used if there are signs of contamination, deterioration (evaporation or discoloration), or if the expiration date has passed.

Limitations: Tryptic Soy Broth With 20% Glycerol serves only as a bacterial cryoprotective medium; tryptic soy base medium should be used for cultivation of microorganisms.

The following procedure applies to the preparation of control cultures of rapidly growing bacteria; the procedure will require modification for the preparation and use of control cultures of *Neisseria*, *Haemophilus*, yeasts, fungi, and mycobacteria.

After using the contents from the cryovials, any unused cell suspensions should be discarded. They should never be refrozen for later use.

PROCEDURE:*

Specimen Collection: Not applicable since this medium is not used for primary isolation of organisms from clinical specimens. This medium is used in preserving pure cultures of isolated organisms. Established isolation techniques and tests for identification and purity are necessary before inoculating this medium.

Method of Use: Prior to inoculation, the medium should be brought to room temperature. Inoculate the broth with a pure 18- to 24-hour culture from a solid medium. Prepare a dense suspension of cells. The cell suspension should contain a sufficient number of viable cells to propagate the culture. After mixing, 0.5-ml portions are placed into sterile cryovials and held at -50°C, or lower, indefinitely. To rule out the possibility of contaminating bacteria, 0.1 ml of the broth culture can be inoculated onto an appropriate agar plate(s).

Interpretation: This medium is a stock culture maintenance broth and culture analysis is made from the media to which the suspension is cultured. Incubate appropriately under the temperature and environment suitable for the isolation of the organism. Refer to the specific medium for culture interpretation and any further information.

Material Required but Not Provided: Standard microbiological supplies and reagents such as loops, needles, freezer incubator, and incinerator are not supplied.

QUALITY CONTROL:*

Microorganisms Used (ATCC#):

Staphylococcus aureus (25923)
Escherichia coli (25922)

Expected Results:

Good recovery upon subculture
Good recovery upon subculture

User Quality Control: Check for signs of contamination and deterioration.

BIBLIOGRAPHY:

1. Finegold, S. M. and E. J. Baron, *Bailey and Scott's Diagnostic Microbiology*, 7th ed., C. V. Mosby, St. Louis, 1986.
2. Koneman, E. W., et al., *Color Atlas and Textbook of Diagnostic Microbiology*, 3rd ed., J. B. Lippincott, Philadelphia, 1988.
3. Morton, H. E., *Quality Control in Microbiology*, University Park Press, Baltimore, Md., 1975, pp. 55-63.
4. National Committee for Laboratory Standards (NCCLS) Document M22-T, Vol. 7, No. 5, Villanova, Pa., 1987, pp. 120-121.

* For more detailed information, consult appropriate references and/or details in the preface of the PML Technical Manual.

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