

(M1550)**TSB - Tryptone Soya Broth with 15% glycerol, 1.5mL (for stock culture preservation)**

TSB with 15% glycerol used as a freeze medium for storage of non-fastidious bacteria, fungi, and yeast.

Composition

Ingredients	g/ L
Tryptone	17.000
Soya peptone	3.000
Sodium chloride	5.000
Dextrose (Glucose)	2.500
Dipotassium hydrogen phosphate	2.500
Glycerol	150.0 ml

Description

Soyabean Casein Digest Medium is recommended by various pharmacopoeias as a sterility testing and as a microbial limit testing medium. This medium is a highly nutritious medium used for cultivation of a wide variety of organisms. Bacteremia is a serious and often life-threatening clinical condition. An important diagnostic tool for this condition is to analyze a blood specimen for the growth of bacteria on selected growth media. The combination of tryptone and soya peptone makes the medium nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Dextrose (Glucose) and dipotassium hydrogen phosphate serve as the carbohydrate source and the buffer, respectively in the medium. Sodium chloride maintains the osmotic balance of the medium.

A 15% concentration of glycerol is added to the broths to maintain viability of microorganisms and to protect cell membranes. Glycerol acts as a cryoprotective agent and allows for long-term bacterial preservation.

TEST PROCEDURE

1. Prepare an overnight culture of the organism to be stored on an appropriate non-selective solid medium.
2. Using a sterile swab or inoculating loop, remove fresh growth from the culture medium and suspend the colonies in the tube to achieve the desired concentration of viable cells.
3. Shake or vortex well before freezing suspension at -20°C or below.

Recovery

1. Allow the tube to thaw by placing it at room temperature.
2. Under aseptic conditions open the tube and use a sterile loop to transfer several full loops from the tube to a suitable agar medium.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture.

Limitations

1. Individual organisms differ in their growth requirement and may show variable growth patterns.
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any organisms based on the user's requirement.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality control**Physical/Chemical control**

Color : Clear TSB with 15% Glycerol pH: 7.0-7.60

Quantity of Medium

1.5 ml of medium in tube

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Microbiological activity

Organisms	Inoculum CFU/ml	Growth
Staphylococcus aureus ATCC 25923	50-100	Good growth
Escherichia coli ATCC 25922	50-100	Good growth
Pseudomonas aeruginosa ATCC 27853	50-100	Good growth

Storage and Shelf Life

Store between 2-8°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Reference

1. Anderson, N.L., et al. Cumitech 3B; Quality Systems in the Clinical Microbiology Laboratory, Coordinating ed., A.S. Weissfeld. American Society for Microbiology, Washington, D.C.
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3. Tille, P., et al. Bailey and Scott's Diagnostic Microbiology, C.V. Mosby Company, St. Louis, MO.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook, Vol. I, II & III. American Society for Microbiology, Washington, D.C.
5. MacFaddin, J.F. 1985. Media for Isolation, Cultivation, Identification, Maintenance of Bacteria, Vol. I. Williams & Wilkins, Baltimore, MD.
6. Quality Assurance for Commercially Prepared Microbiological Culture Media, M22. Clinical and Laboratory Standards Institute (CLSI - formerly NCCLS), Wayne, PA.