

Thioglycollate Broth (TG Broth)**(M1520)**

Recommended for the recovery of anaerobic and facultative microorganisms. Sterile, in glass bottles.

Composition

Ingredients	g / L
Tryptone -----	15.000
Yeast extract -----	5.000
Dextrose (Glucose) -----	5.500
Sodium chloride -----	2.500
L-Cystine -----	0.500
Sodium thioglycollate -----	0.500

Description

Thioglycollate Medium is used for the sterility testing of certain biological products which are turbid or viscous. The medium is highly enriched and supports the growth of pathogenic bacteria. Tryptone serves as a source of nitrogen and carbon compounds, long chain amino acids and other essential nutrients. Yeast extract serve as source of essential nutrients to the contaminants, if present. Dextrose serves as the energy source. Sodium chloride maintains the osmotic equilibrium of the medium whereas L-cystine, an amino acid, also serves as source of essential growth factors.

Type of specimen

Clinical sample: Blood, Body Fluids and other pathological specimen.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines. After use, contaminated materials must be sterilized by autoclaving before discarding.

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. Proper conditions must be maintained for optimal recovery of organisms.
2. It is recommended for paediatric use. Not recommended for adult use.
3. 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 TG Broth pH: 6.90-7.30

Quantity of Medium

20 ml of medium in glass bottle

Cultural Response

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

Microbiological activity

Organisms	Inoculum CFU/ml	Growth
Staphylococcus aureus ATCC 25923	50-100	Good growth
Streptococcus pneumonia ATCC 49619	50-100	Good growth
Escherichia coli ATCC 25922	50-100	Good growth
Pseudomonas aeruginosa ATCC 27853	50-100	Good growth
Candida albicans ATCC 10231	50-100	Good growth
Aspergillus brasiliensis ATCC 16404	50-100	Good growth
Clostridium perfringens ATCC 13124	50-100	Good growth under anaerobic conditions

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. N.I.H. Memorandum, 1955: Culture Media for Sterility Tests, 4th Revision.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.