Biomed Global

Rev: 0

Fluid Thioglycollate Medium | Ready-to-use Media

Effective Date: 22/12/2025

a product by Biomed MDX

REF TB05T4001

IVD

Intended Use:

Used for the cultivation of aerobic, microaerophilic, and anaerobic microorganisms in sterility testing.

Principle of the Procedure:

Fluid Thioglycollate Medium (FTM) is a differential enrichment broth used to determine microbial aerotolerance by establishing a stable oxygen gradient. Its principle relies on the reducing agents sodium thioglycollate and L-cystine, which chemically neutralise dissolved oxygen. A minimal concentration of agar increases viscosity to retard atmospheric diffusion. The redox state is monitored by the indicator resazurin, which remains colourless in reduced zones and turns pink in oxidised areas. Consequently, the spatial distribution of growth within the tube, ranging from the aerobic surface to the anaerobic depths, serves as a diagnostic indicator of an organism's specific oxygen requirements.

Product Summary:

Fluid Thioglycollate Medium (FTM) is a multipurpose, enriched differentiating medium primarily used for the sterility testing of biologics and the cultivation of aerobic, microaerophilic, and anaerobic organisms. It is a standard requirement in USP <71> testing for pharmaceutical products due to its ability to support the growth of even chemically injured microbes or those with exacting nutritional needs. Characterized by its clear-to-straw color with a distinct pink oxidation zone at the surface, the medium serves as a high-performance diagnostic tool for determining the respiratory capabilities of an isolate based on its vertical distribution within the tube.

Formulation* (PER LITER):

Pancreatic Digest of Casein	15.0g
Yeast Extract	5.0g
Dextrose	5.5g
Sodium Chloride	2.5g
L-Cystine	0.5g
Sodium Thioglycollate	0.5g
Agar	0.75g
Resazurin	1.0mg

pH 7.1 +/- 0.2

*Adjust and/or supplemental as required to meet performance criteria

Procedure

Materials Provided

5mL Fluid Thioglycollate Medium

Materials Required But Not Provided

Ancillary culture media, reagents, and laboratory equipment as required.

Test Procedure

1. Inoculate and streak the specimen as soon as possible after it is received in the laboratory with an aseptic technique.
2. Incubate at 35 ± 2°C for up to 6 to 8 hours.
3. Observe the result according to user requirements.
4. Dispose of all used reagents and contaminated materials as infectious waste. Laboratories must handle and dispose of all waste safely according to regulations.

Results

Examine for colonies exhibiting typical microscopic and colonial morphology. Appropriate biochemical or immunological tests may be required for final identification

Quality Control

Inoculate representative samples with the following strains. Incubate the inoculated tubes at 35 ± 2°C for up to 6 to 8 hours.

Strains	ATCC®	Growth Results
Bacteroides fragilis	25285	Growth
Staphylococcus aureus	25923	Growth
Clostridium sporogenes	11437	Growth
Negative Control	-	No growth

Transportation:

Temperature fluctuations may occur during transportation. However, these fluctuations do not affect the performance, quality, or safety of the media.

Storage and Shelf Life:

Upon receipt, store tubes at 2 to 8°C in their original sleeve wrapping until just before use. Avoid freezing and overheating.

The tubes may be inoculated up to the expiration date (see package label) and incubated for the recommended incubation times.

Warning and Precautions:

For in vitro diagnostic use. For Professional Use Only. Do Not Reuse.

Do not use tubes if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration.

Limitations of the Procedure

This medium is for laboratory use only and is not intended for the diagnosis of disease or other conditions. Identifications are presumptive and colonies should be identified using appropriate methods

Reference

1. Farber, J. F., & Seligmann Jr, E. B. (1968). Bacteroides vulgatus, a nonsporeforming anaerobe for testing fluid thioglycollate medium. *Applied Microbiology*, *16*(7), 1102-1103.

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Packaging Symbol

Symbol	Definition
REF	Catalogue number
IVD	In Vitro Diagnostic Medical Device
LOT	Batch code
	Date of manufacture
	Temperature limit
	Use-by date
	Keep away from sunlight
	Do not re-use
	Fragile, handle with care
	Consult instructions for use or consult electronic instructions for use
	Do not use if packaging damaged and consult instructions for use
	Manufacturer

Further Information:

For further information please contact your Biomed MDX representative.

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