

Alternative Thioglycollate Medium (Sterility Testing Medium)

Intended Use

Alternative Thioglycollate Medium (Sterility Testing Medium) is recommended for sterility testing of certain biological products, which may be turbid or viscous.

Summary

Alternative Thioglycollate Medium is formulated as described in the N.I.H. memorandum. It is used for the sterility testing of certain biological products which are turbid or viscous and can't be tested using Fluid Thioglycollate Medium. Both the media have similar composition, except agar and resazurin that are not included in Alternative Thioglycollate Medium. This deletion makes it suitable for sterility testing of viscous products.

Principle

Pancreatic digest of casein 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. Sodium thioglycollate and L-cystine lower the oxidation-reduction potential of the medium by removing oxygen to maintain a low Eh. Sodium thioglycollate also helps to neutralize the toxic effects of mercurial preservatives.

Formula*

Ingredients	g/L
Pancreatic Digest of Casein	15.0
Dextrose Monohydrate	5.5
Yeast Extract	5.0
Sodium Chloride	2.5
Sodium Thioglycollate	0.5
L-Cystine	0.5
Final pH (at 25°C)	7.1 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability

1. Store the ready to use Alternative Thioglycollate Medium at 15°C-25°C in a cool, dry place away from light.
2. Stability of the kit is as per expiry date mentioned on the label.

Directions

1. Bring the Alternative Thioglycollate Medium vial to the room temperature 22°C-30°C.
2. Use Alternative Thioglycollate Medium as per required application.

Quality Control

Appearance: Yellow coloured, clear solution without any precipitate.

Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP and growth is observed after an incubation at 30°C-35°C for ≤3 days, under anaerobic conditions.

Growth Promoting Properties: The test results observed are within the specified temperature and the shortest period of time, inoculating 10-100 cfu (at 30°C- 35°C for ≤3 days).

Growth Promoting:

Organism	Growth
<i>Bacteroides vulgatus</i> (8482)	Good
<i>Clostridium sporogenes</i> (11437)	Good
<i>Clostridium sporogenes</i> (19404)	Good

Validation and Growth Promotion

(Growth promotion is carried out after an incubation at 20°C-25°C for ≤3 days for bacteria and ≤5 days for fungi as per USP/EP/JP).

Organism (ATCC)	Growth
<i>Candida albicans</i> 3147 (10231)	Good
<i>Bacillus spizizenii</i> (6633)	Good
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good

Note: Inoculum cfu for good growth is 10-100.

Remarks

1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discoloration, drying or any other sign of deterioration.
2. Good laboratory practices and hazard precautions must be observed at all times.
3. After use media containers, sample, sample containers and other contaminated materials must be sterilized or incinerated before discarding.
4. All autoclaved biohazards should be disposed off in accordance with state and local environmental regulations.
5. Only qualified personnel who have been trained in microbiological procedures should handle all infected specimens and inoculated culture media.
6. User should ensure that any machinery or apparatus used and by chance contaminated must be safely disinfected or sterilized. The environment in which microbiological cultures are handled must also be taken into account.

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
203010460100	Bottle Media	100 mL
203010470100	Bottle Media	100 mL

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
