TAT Broth

Intended Use

TAT Broth is used for cultivating microorganisms from highly viscous or gelatinous materials.

Summary

TAT Broth is prepared according to the formula recommended by United States Food and Drug Administration for enrichment and further isolation and cultivation of Gram-negative bacteria in cosmetics, tropical drugs and in the sterility testing of viscous or gelatinous substances. It is especially adapted for the testing of cosmetics. Cosmetics and pharmaceutical products are subject to contamination during manufacturing and subsequent use by consumers. Preservatives are used in aqueous products to make them self-sterilizing for vegetative bacteria, yeasts and moulds, and bacteriostatic or bactericidal for spores.

Principle

Pancreatic digest of casein provides the nitrogen, vitamins, amino acids and carbon in TAT Broth Base. Lecithin and polysorbate 20 neutralize preservatives in the cosmetics or pharmaceutical products, allowing bacteria to grow.

Formula*

Ingredients	g/L
Pancreatic Digest of Casein	20.0
Lecithin	5.0
Polysorbate 20	40.0 mL
Final pH (at 25°C)	7.2 ± 0.2
*Adjusted to suit performance parameters	

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Directions

- 1. Bring the TAT Broth vial to the room temperature 22°C-30°C.
- 2. Use TAT Broth as per required application.

Quality Control

Appearance: Light yellow coloured, clear solution with slight precipitate.

Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/BP/JP and growth is observed after an incubation at 30°C-35°C for 40-48 hours for bacteria.

Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time, inoculating \leq 100 cfu (at 30°C-35°C for 40 hours for bacteria).

Organism (ATCC)	Growth
Staphylococcus aureus subsp. aureus (25923)	Good
Pseudomonas aeruginosa Strain Boston 41501 (27853)	Good
Bacillus spizizenii (6633)	Good
Candida albicans 3147 (10231)	Good
Pseudomonas aeruginosa (9027)	Good
Staphylococcus aureus subsp. aureus (6538)	Good

Growth Promotion Test in presence of Quarternary Ammonium Compound:

Organism (ATCC)	Test*	Control**
Staphylococcus aureus subsp. aureus (6538)	Good	Inhibited
Bacillus spizizenii (6633)	Good	Inhibited

Key:

* TAT Broth

** Soyabean Casein Digest Medium

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

Remarks

- 1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discolouration, 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.

Storage and Stability

- 1. Store the ready to use TAT Broth 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.

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.

References

- 1. Food and Drug Administration, 1969, Procedure for Examination of Tropical Drugs and Cosmetics.
- 2. Orth, 1993, Handbook of Cosmetic Microbiology, Marcel Dekker, Inc., New York, N.Y.
- 3. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
- 4. Data on file: Microxpress[®], A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description
203200410009	Ready Prepared Tube
203200960090	Bottle Media
203200410090	Bottle Media

Pack Size 50 x 9 mL 10 x 90 mL 90 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.