ACUTONE TRYPTIC SOY BROTH (NON-ANIMAL TSB)
SKU: 700003691, 700003692, 700003693, 700003694
NCM0903

Intended Use

Acutone Tryptic Soy Broth (Non-animal TSB) is used for the cultivation of a wide variety of microorganisms. Acutone Tryptic Soy Broth (Non-animal TSB) is completely free of animal-origin components and is in compliance with United States and European Pharmacopeia testing methodologies as stated for Tryptic Soy Broth in a laboratory setting Acutone Tryptic Soy Broth (Non-animal TSB) is not intended for use in the diagnosis of disease or other conditions in humans.

Description

Tryptic Soy Broth (TSB) is a general purpose medium that is commonly referred to as Soybean-Casein Digest Medium. Acutone Tryptic Soy Broth (Non-animal TSB) was developed as an alternative to Tryptic Soy Broth (NCM0004) and is completely free of animal-origin components. Over the past decade, detection of Bovine Spongiform Encephalopathy (BSE) and Transmissible Spongiform Encephalopathies (TSE) in animals has caused great concern among regulated companies. Acutone Tryptic Soy Broth (Non-animal TSB) fits a role in this regulated industry. This industry has a need for a nutritious, rich medium that will support the growth of fastidious microorganisms and contains no animal products.

TSB is recommended for testing in cosmetics, food industry, and chosen by the USDA Animal and Plant Health Inspection Service for detecting bacteria in live vaccines. Acutone Tryptic Soy Broth (Non-animal TSB) is an alternative to Tryptic Soy Broth.

Typical Formulation

Non-Animal Peptone Blend	17.0 g/L
Enzymatic Digest of Soybean Meal	3.0 g/L
Sodium Chloride	5.0 g/L
Dipotassium Phosphate	2.5 g/L
Dextrose	2.5 g/L

Final pH: 7.3 ± 0.2 at 25°C

Precaution

Refer to SDS

Preparation

1. Suspend 30 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

Quality Control Specifications

Dehydrated Appearance: Powder is homogeneous, free flowing, and white to tan.

Prepared Appearance: Prepared medium is brilliant to clear, yellow to dark amber with no to light precipitate.

Expected Cultural Response: Cultural response in Acutone Tryptic Soy Broth (Non-animal TSB) at the appropriate atmosphere and temperature and examined for growth after 18 – 72 hours incubation.

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Microorganism	Approx. Inoculum (CFU)	Expected Growth
Bacteroides vulgatus ATCC® 8482	10 - 300	Fair to excellent
Escherichia coli ATCC® 25922	10 - 300	Good to excellent
Neisseria meningitidis ATCC® 13090	10 - 300	Poor to good
Staphylococcus aureus ATCC® 25923	10 - 300	Good to excellent
Staphylococcus epidermidis ATCC ® 12228	10 - 300	Fair to excellent
Streptococcus pneumoniae ATCC® 6305	10 - 300	Fair to excellent
Streptococcus pyogenes ATCC® 19615	10 - 300	Good to excellent

The organisms listed are the minimum that should be used for quality control testing.

USP Growth Promotion Testing:
Cultural response in Acutone Tryptic Soy Broth (Non-animal TSB**)** under the appropriate atmosphere and temperature with examined for growth within 5 days of incubation.

Microorganism	Approx. Inoculum (CFU)	Expected Growth
Aspergillus brasiliensis ATCC ® 16404	10 - 100	Growth
Bacillus subtilis ATCC® 6633	10 - 100	Growth
Candida albicans ATCC® 10231	10 - 100	Growth
Micrococcus luteus ATCC® 9341	10 - 100	Growth

The organisms listed are the minimum that should be used for USP Growth Promotion testing.

Test Procedure
Refer to appropriate references for specific procedures using Acutone Tryptic Soy Broth (Non-animal TSB) and Tryptic Soy Broth.

Results
Refer to appropriate references for test results.

Expiration
Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container.

Limitations of the Procedure
Due to nutritional variation, some strains may grow poorly or fail to grow on this medium.

Storage
Store sealed bottle containing the dehydrated medium at 2 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light.

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References

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