

Technical Data

Modified Newings Tryptose Broth Base (Tryptose Serum Broth Base)

M2019

Intended Use:

Recommended for routine identification of Mycoplasma species.

Composition**

Ingredients	\mathbf{g} / \mathbf{L}
Tryptose	20.000
Sodium chloride	5.000
Disodium hydrogen phosphate	2.500

^{**}Formula adjusted, standardized to suit performance parameters

Directions

Suspend 27.50 grams in 1000 ml purified / distilled water containing 5 ml glycerol. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Aseptically add the rehydrated contents of one vial of PDTY Selective Supplement (FD334) and 130 ml of pig serum (RM10415) (Inactivate at 56°C for not more than 30 minutes). Mix well and distribute into sterile tubes or flasks as desired.

Principle And Interpretation

Tryptose Serum Broth Base demonstrated by Newing & McLeod, 1958 was later modified by Gourlay (1964). This medium is as described by Davies (1).

This medium is recommended for the cultivation of *Mycoplasma*. The medium ingredients and all the supplements should be free of any toxic substances even in small amounts. Many *Mycoplasma* require serum for their good growth and also presence of antibiotic is necessary to prevent the growth of contaminating organisms. Mostly the *Mycoplasma* species are aerobic or facultatively anaerobic but some are microaerophilic. Few are anaerobic saprophytic *Mycoplasma* which grow best at 22-35°C while pathogenic strains grow at 35°C.

Tryptose serves as a source of nitrogeneous and carbonaceous compounds, long chain amino acids, vitamins and other growth nutrients. Sodium chloride maintains osmotic balance. Dextrose (Glucose) serves as an energy source. Yeast extract provides vitamins especially Group B Vitamins. Glycerol serves as a carbon sorce. Penicillin G and thallium acetate inhibits contaminating flora. Pig serum provides good growth.

Type of specimen

Clinical samples - Sputum

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3). 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. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

- 1. The medium ingredients and all the supplements should be free of any toxic substances even in small amounts.
- 2. Further biochemical tests should be carried out for confirmation.

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.

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Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Yellow coloured clear solution in tubes

Reaction

Reaction of 2.1% w/v aqueous solution at 25°C. pH: 7.8±0.2

Cultural Response

Cultural characteristics observed in presence of 10% Carbon dioxide with added Pig serum (RM10415), inactivated at 56°C for not more than 30 minutes and PDTY Selective Supplement (FD334), after an incubation at 22-35°C for 48 hours.

Organism	Growth
Mycoplasma bovis ATCC 25523	good-luxuriant
Mycoplasma gallinarium ATCC 19708	good-luxuriant
Mycoplasma pneumoniae ATCC 15531	good-luxuriant
Streptococcus pneumoniae ATCC 6303	good-luxuriant

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. 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 clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

Reference

- 1. Davis,G and W.C.S.Read; J.Hyg., Camb. (1968, A modification of the growth-inhibition test and its use for detecting *Mycoplasma mycoides var.mycoides*
- 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.

Revision: 02/2024

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In vitro diagnostic medical device





Storage temperature



Do not use if package is damaged

Disclaimer:

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