



Technical Data

Tryptose Serum Broth Base (Modified Newings Tryptose Broth Base) M2019

Recommended for routine identification of *Mycoplasma* species.

Composition**

Ingredients	Gms / Litre
Tryptose	20.000
Sodium chloride	5.000
Anhydrous disodium phosphate	2.500

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 27.50 grams in 1000 ml 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 Mycoplasma 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 nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other growth nutrients. Sodium chloride maintains osmotic balance. Dextrose serves as an energy source. Yeast extract provides vitamins especially Group B Vitamins. Glycerol serves as a carbon source. Penicillin G and thallium acetate inhibits contaminating flora. Pig serum provides good growth.

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 Mycoplasma Selective Supplement (FD334), after an incubation at 22-35°C for 48 hours.

Cultural Response

Organism	Growth
Cultural Response <i>Mycoplasma bovis</i> ATCC 25523	good-luxuriant
<i>Mycoplasma gallinarium</i> ATCC 19708	good-luxuriant

Please refer disclaimer Overleaf.

Mycoplasma pneumoniae good-luxuriant
ATCC 15531
Streptococcus pneumoniae good-luxuriant
ATCC 6303

Storage and Shelf Life

Store below 30°C in tightly closed container. Use freshly prepared medium. Use before expiry period on the label.

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*

Revision : 00 / 2016

Disclaimer :

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