Tryptose Broth, w/ Thiamine HCl

M997

Intended Use:

Used for isolation, cultivation and differentiation of fastidious microorganisms in an infusion free medium.

Composition**

Ingredients	g / L
Tryptose	20.000
Dextrose (Glucose)	1.000
Sodium chloride	5.000
Thiamine hydrochloride	0.005
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 26.0 grams in 1000 ml purified/distilled water. If desired, add 0.5 - 1% agar. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. For preparing blood medium, aseptically add 5% v/v sterile defibrinated blood. Mix well and dispense in sterile tubes or flasks as desired.

Principle And Interpretation

Huddleson used Tryptose media for the isolation of *Brucella* species from man (1). Tryptose containing media, rather than the conventionally used meat infusion media have been used for the enumeration and isolation of *Brucella* species (2,3). Addition of thiamine to tryptose media enhanced the recovery of *Brucella* species especially *Brucella suis* (4,5).

This medium can be used as general purpose medium for cultivation of wide variety of organisms. It can also be supplemented with defibrinated blood (sheep, horse) to prepare blood containing medium for the isolation of fastidious organisms like *Brucella*. Tryptose Broth with thiamine HCl is recommended by APHA (6) and Diagnostic Procedures and Reagents (7) for the isolation and cultivation of *Brucella* species and also Streptococci, meningococci, pneumococci and other pathogenic bacteria (8). Dextrose is the source of energy. Tryptose serves as nitrogen source while sodium chloride maintains osmotic equilibrium.

Type of specimen

Clinical sample: CSF; Food and dairy samples.

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (9,10).

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (11,12)

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic Use. 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. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2.Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.
3.All presumptive anaerobic organisms must be identified by confirmatory test.

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.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of Prepared medium

Basal Medium : Yellow coloured clear to slightly opalescent Solution. After addition of 5% v/v sterile defibrinated blood: Cherry red coloured opaque solution forms in tubes.

Reaction

Reaction of 2.6% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH

7.00-7.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 48-72 hours with added 5% v/v sterile defibrinated blood in presence of 10% Carbon dioxide (CO2).

Organism	Growth
Brucella melitensis ATCC 4309	good-luxuriant
Brucella suis ATCC 4314	good-luxuriant
Streptococcus pneumoniae ATCC 6303	good-luxuriant
Streptococcus pyogenes ATCC 19615	good-luxuriant

Storage and Shelf Life

Store below 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 (9,10).

Reference

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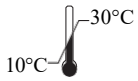
IVD ***In vitro*** **diagnostic medical device**



Storage temperature

EC REP CEpartner4U, Esdoornlaan 13,
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CE Marking

Do not use if package is damaged

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