Tryptose Agar

M538

Intended Use:

With or without the addition of blood or other substances for isolation, cultivation and differentiation primarily of *Brucella*, but also of Streptococci, Pneumococci, Meningococci and other pathogenic microorganisms.

Composition**

Ingredients	g / L
Tryptose	20.000
Dextrose (Glucose)	1.000
Sodium chloride	5.000
Agar	15.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 41.0 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the media completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C.For blood media, aseptically add 5% v/v sterile defibrinated blood. Mix well and pour into sterile Petri plates.

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). Tryptose Agar is also recommended by APHA (4) and FDA (5). This medium can be used as general purpose media for cultivation of wide variety of organisms. It can also be supplemented with defibrinated blood (sheep, horse) to prepare blood agar for the isolation of fastidious organisms like *Brucella.* Dextrose is the source of energy. Tryptose serves as nitrogen source while sodium chloride maintains osmotic equilibrium. Blood Agar may be prepared by adding 5%v/v sterile defibrinated blood to molten sterile Tryptose Agar at 50°C.

Type of specimen

Clinical sample : CSF; Food samples

Specimen Collection and Handling:

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (4).
For clinical samples follow appropriate techniques for handling specimens as per established guidelines (6,7).
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. 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
Gelling
Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Basal Medium : Yellow coloured, clear to slightly opalescent gel. **With addition of 5% v/v sterile defibrinated blood,** cherry red coloured opaque gel forms in Petri plates.

Reaction

Reaction of 4.1% 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 (CO_2).

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 (6,7).

Reference

1.Huddleson I. F., 1943, Brucellosis in man and animals, rev., Ed., The Commonwealth Fund, New York, N.Y.
2.Huddleson I. F., 1939, Brucellosis in Man and Animals, Oxford University Press, Oxford, England.
3.Ruiz Castañeda M., 1947, Proc. Soc. Exp. Biol. Med., 64:114.
4.Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
5.U.S. Food and Drug Administration, 1995, Bacteriological Analytical Manual, 8th Ed., AOAC International, Gaithersburg, Md.
6.Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
7.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 : 04/2024

HiMedia Laboratories Pvt. Limited, Plot No.C-40, Road No.21Y, MIDC, Wagle Industrial Area, Thane (W) -400604, MS, India

IVD *In vitro* diagnostic medical device

30°C 10°C Storage temperature

EC REP CEpartner4U, Esdoornlaan 13, 3951DB Maarn, NL www.cepartner4u.eu

CE Marking

Do not use if package is damaged