BAM
COMPF

Tryptose Broth

For the enrichment and cultivation of streptococci, pneumococci, meningococci, Listeria, pasteurellae and other pathogenic microorganisms.

IVD

In Vitro Diagnostic Medical Device –

For professional use only

CE

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Merck KGaA, 64271 Darmstadt

See also General Instruction for Use „How to use Dehydrated Culture Media"

For MSDS, warnings and precautions see our website: www.merck-chemicals.com

Principle

Microbiological method.

General Information

Tryptose culture media are recommended by HAUSLER and KOONTZ (1970) in diagnostic procedures.

Mode of Action

Addition of crystal violet inhibits the Gram-positive bacterial flora (HAUSLER and KOONTZ 1970). I Isolation of Listeria monocytogenes from brain (GRAY et al. 1948), preparation of a Listeria Selective Agar by adding potassium tellurite (GRAY et al. 1950). Tryptose Agar also serves as a satisfactory base for preparing blood agar.

Typical Composition (g/litre)

Tryptose 20.0; D(+)glucose 1.0; sodium chloride 5.0; thiaminium dichloride 0.005;

Preparation

Suspend 26 g Tryptose Broth/litre, autoclave (15 min at 121 °C).

pH: 7.3 ± 0.2 at 25 °C.

The prepared media are clear and yellowish-brown.

Preparation of tryptose crystal violet agar: before autoclaving, add 1.4 ml of an aqueous 1 % crystal violet solution/litre and 13 g/litre agar agar, mix homogeneously.

Preparation of tryptose blood agar: sterile Tryptose Broth plus 13.0 g/l Agar,cooled to 45-50 °C, add 5 % sterile defibrinated blood and mix taking care not to form any bubbles.

Storage

Usable up to the expiry date when stored dry and tightly closed at +15 to +25° C. Protect from light.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 to +25° C.

Specimen

e.g. Stool, blood.

Clinical specimen collection, handling and processing, see general instructions of use.

Experimental Procedure and Evaluation

A pre-enrichment with Tryptose Broth should be carried out if only small numbers of fastidious bacteria are expected. Incubation of anaerobic microorganisms should be carried out, in each case, for up to 5 days at 35 °C in a 10 % carbon dioxide atmosphere. This can be achieved using Anaerocult® C or Anaerocult® C mini.

For the cultivation of other microorganisms, Tryptose Agar and Tryptose Broth are used. The incubation should be carried out, in each case, under optimum conditions.

Tryptose citrate broth can be used to prepare blood cultures. 2 to 5 ml of fresh blood taken from the patient are mixed with 20 ml of the broth.

Appearance of Colonies	Microorganisms
Pale pink, opaque, rough surface, large	streptococci

Further differentiation is possible, if Brucella Differential Agar is inoculated with pure Brucella colonies. Instead of employing culture media containing dyes, differentiation can also be performed with strips of paper (CRUICKSHANK 1948) or filter paper discs (PICKETT et al. 1953, SCHINDLER 1955) soaked in the dye solutions and placed on the surface of Tryptose Agar.

Literature

GRAY, M.L., STAFSEHT, H.J., THORP, F., a. RILEY, W.F.: A new technique for isolation of Listerella from bovine brain. - **J. Bact., 55**; 471-476 (1948).

GRAY, M.L., STAFSEHT, H.J., a. THORP, F. jr.: The use of potassium tellurite, sodium azide and acetic acid in a selective medium for the isolation of Listeria monocytogenes. - **J. Bact., 59**; 443-444 (1950).

HAUSLER, W.J., a. KOONTZ, F.P.: Brucellosis in Diagnostic procedures for Bacterial, Mycotic and Parasitic Infections; 5th ed., APHA, New York (1970).

Tryptose Broth

Ordering Information

Product	Ordering No.	Pack size
Tryptose Broth	1.10676.0500	500 g
Agar-agar purified	1.01614.1000	1 kg
Anaerobic jar	1.16387.0001	1 ea
Anaeroclip®	1.14226.0001	1 x 25
Anaerocult® C	1.16275.0001	1 x 10
Anaerocult® C mini	1.13682.0001	1 x 25
Crystal violet Certistain®	1.15940.0025	25 g
Plate basket	1.07040.0001	1ea
Thionine (acetate) Certistain®	1.15929.0025	25 g
tri-Sodium citrate dihydrate	1.06448.0500	500 g
Defibrinated blood		
Fuchsin, basic		

Quality control

Test strains	Growth
Streptococcus pyogenes ATCC 12344	good / very good
Streptococcus pneumoniae ATCC 6301	good / very good
Pasteurella multocida ATCC 43137	fair / good
Listeria monocytogenes ATCC 19118	good / very good
Shigella flexneri ATCC 12022	good / very good
Escherichia coli ATCC 25922	good / very good
Staphylococcus aureus ATCC 25923	good / very good