

Tryptose Phosphate Broth II

For the cultivation of fastidious microorganisms.

Cat. 1294

Practical information

Aplications Categories
Antibiotic Assay Fastidious microorganisms
Selective enrichment Fastidious microorganisms

Industry: General cultivation

Regulations: BAM

Principles and uses

Tryptose Phosphate Broth II is recommended for the cultivation of fastidious and pathogenic microorganisms as well as antibiotic resistance and sentivity tests by the serial tube dilution technique. If desired, the addition of 0,1 to 0,2% agar to the broth enhances the growing of anaerobic fastidious microorganisms by delaying the dispersion and diffusion of CO2. The low concentration of agar provides ideal condition for the aerobic growing in the upper part of the tubes and anaerobic and micro-aerobic conditions growing in the lower part of the tube.

Peptones provide nitrogen, vitamins, minerals and amino acids essential for growth. Dextrose is the fermentable carbohydrate providing carbon and energy. Sodium chloride supplies essential electrolytes for transport and osmotic balance. The buffering capacity is provided by the disodium phosphate.

Formula in g/L

Dextrose	2	Disodium phosphate	2,5
Sodium chloride	5	Tryptose	20

Preparation

Suspend 29,5 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution and dispense into the tubes. Sterilize in autoclave at 121 °C for 15 minutes. While preparing this medium it is important to avoid overheating and to distribute it into tubes before sterilization.

Instructions for use

Inoculate and incubate at a temperature of 37±2 °C for 24-38 hours.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Clear beige	Amber, slightly opalescent	7,3±0,2

Microbiological test

Incubation conditions: (37±2 °C / 24-38 h).

Microorganisms	Specification
Staphylococcus epidermidis ATCC 12228	Good growth
Neisseria meningitidis ATCC 13090	Good growth
Streptococcus pyogenes ATCC 19615	Good growth
Streptococcus pneumoniae ATCC 6305	Good growth

Storage

Temp. Min.:2 °C Temp. Max.:25 °C

Bibliography

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]. Waisbren, B.A., M.S. Carr and J.Dunnett, 195. The tube dilution method of determining bacterial sensitivity to antibiotics. Am.J.Clin. Pathol. 21:884.

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