Streptococcus Selection Agar

M304

Intended Use:

Recommended for selective isolation and enumeration of all types of Streptococci including group A ß-haemolytic strains from clinical samples.

Composition**

Ingredients	Gms / Litre
Tryptone	15.000
Soya peptone	5.000
Dextrose (Glucose)	5.000
Sodium chloride	4.000
Sodium citrate	1.000
Sodium sulphite	0.200
L-Cystine	0.200
Sodium azide	0.200
Crystal violet	0.0002
Agar	15.000
Final pH (at 25°C)	7.4±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 45.6 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Autoclaving is not required if medium is used on the same day. If storage is desired, sterilize by autoclaving at 118°C for 15 minutes. Avoid overheating.

Principle And Interpretation

Streptococcus Selection Agar / Broth is formulated as per Pike (1), for the selective isolation of Streptococci from various materials, especially those which are heavily contaminated with accompanying heterogenous microbial flora (2). Abilities of these media to recover group A ß-haemolytic Streptococci has been reported by Welch et al (3). Tryptone, Soya peptone, dextrose and salts in the medium provide nutrients essential for the growth of Streptococci. Sodium azide and sodium sulphite inhibit gram-negative rods while crystal violet suppresses Staphylococci. However, Streptococci are not affected by these inhibitors at these concentrations. Due to this reason, this media is useful in studies of streptococcal flora from nutritional, dental and epidemiological specimens. Growth of coliforms, *Proteus, Pseudomonas* and *Bacillus* species is markedly suppressed in this medium.

However, some strains of Staphylococci and Pneumococci may grow in this medium. All streptococcal colonies must be confirmed for identification.

Type of specimen

Clinical samples - Urine; Water samples

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6).

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards(4).

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. All presumptive streptococci must be confirmed for identification.

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
Light yellow with purple tinge to light purple coloured clear to slightly opalescent gel forms in Petri plates
Reaction
Reaction of 4.56% w/v aqueous solution at 25°C. pH : 7.4±0.2
pH
7.20-7.60
Cultural Response
Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 24 hours.

Organism	Inoculum (CFU)	Growth	Recovery
Bacillus subtilis subsp. spizizenii ATCC 6633 (00003*)	>=10^4	inhibited	0%
Enterococcus faecalis ATCC 29212 (00087*)	50-100	luxuriant	>=50%
Escherichia coli ATCC 25922 (00013*)	50-100	none-poor	<=10%
Pseudomonas aeruginosa ATCC 27853(00025*)	>=10^4	inhibited	0%
Staphylococcus aureus subsp. aureus ATCC 25923 (00034*)	50-100	none-poor	<=10%
Streptococcus pyogenes ATCC 19615	50-100	luxuriant	>=50%

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°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 (5,6).

Reference

1.Pike R. M., 1945, Am. J. Hyg., 41:211.
2.Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
3.Welch D. F., Henel D., Pickett D., Johnson S., 1991, Am. J. Clin. Pathol., 95:587.
4.Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
5.Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
6.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

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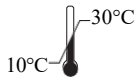
IVD ***In vitro* diagnostic medical device**



Storage temperature

EC REP

CEpartner4U, Esdoornlaan 13,
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CE Marking

Do not use if package is damaged

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