Streptococcus Selection HiVeg™ Agar

MV304

Streptococcus Selection HiVeg Agar is recommended for selective isolation and enumeration of all types of Streptococci, including group A beta haemolytic strains.

Composition**

Ingredients	Gms / Litre
HiVeg hydrolysate	15.000
Papaic digest of soyabean meal	5.000
Dextrose	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 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 12 lbs pressure (118°C) for 15 minutes. Avoid overheating. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Caution : Sodium azide has a tendency to form explosive metal-azide with plumbing materials. It is advisable to use enough water to flush off the disposable.

Principle And Interpretation

Streptococcus Selection HiVeg Agar is prepared by using HiVeg Hydrolysate in place of Casein enzymic hydrolysate , hence this medium is free of BSE/TSE risks. This medium is the modification of Streptococcus Selection Agar which is based on the suggestion of Pike (1), for the selective isolation of Streptococci from various materials, especially those which are heavily contaminated with accompanying microbial flora (2). This also has been reported by Welch et.al. as well (3). This medium like the conventional media have the ability of recovering group A ß haemolytic Streptococci.

HiVeg hydrolysate, papaic digest of soyabean meal, dextrose and salts provide nutrients essential for the growth of Streptococci. Sodium azide, sodium sulphite inhibits gram-negative rods and the crystal violet suppresses Staphylococci. However, Streptococci are not affected by these inhibitors at these concentrations. Due to this reason, this medium is useful in studies of streptococcal flora from nutritional, dental and epidemiological research. 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.

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 to medium amber 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.

Cultural Response

Organism	Inoculum (CFU)	Growth	Recovery
Cultural Response			
Bacillus subtilis ATCC 6633	>=10^3	inhibited	0%
Enterococcus faecalis ATCC 29212	50-100	luxuriant	>=50%
Escherichia coli ATCC 25922	50-100	none-poor	<=10%
Pseudomonas aeruginosa ATCC 27853	>=10^3	inhibited	0%
Staphylococcus aureus ATCC 25923	50-100	none-poor	<=10%
Streptococcus pyogenes ATCC 19615	50-100	luxuriant	>=50%

Storage and Shelf Life
Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference
1.Pike, R. M. 1944. Proc. Soc. Exp. Biol. and Med., 57.
2.Lennettee., Spaulding. and Truant. 1974. Manual of Clinical Microbiology. 2 ed. Washington, D.C.: ASM.
3.Welch, D. F., Henel, D., Pickett, D. and Johnson, S. 1991. Am. J. Clin. Pathol, 95.

Revision : 0/ 2014

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