

TM 532 - STREPTOCOCCUS SELECTION BROTH (STREPTOSEL BROTH)

INTENDED USE

For selective isolation and cultivation of Streptococci including group A beta haemolytic strains.

PRODUCT SUMMARY AND EXPLANATION

Streptococcus Selection Broth is based on the suggestion of Pike, for the selective isolation of Streptococci from various materials, especially those which are heavily contaminated with accompanying microbial flora. Welch et al also reported the abilities of this medium to recover group A b-haemolytic Streptococci.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic 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

PRINCIPLE

Casein enzymic hydrolysate, papaic digest of soyabean meal, 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.

INSTRUCTION FOR USE

- Dissolve 30.6 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 118°C for 15 minutes.
- Avoid overheating.

CAUTION: Sodium azide has a tendency to form explosive metalazide with plumbing material. It is advisable to use enough water to flush off the disposable.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Cream to yellow homogeneous free flowing powder.
- Appearance of prepared medium** : Light to medium amber coloured clear to slightly opalescent gel forms in tubes.
- pH (at 25°C)** : 7.4±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Bacillus subtilis</i>	6633	$\geq 10^3$	Inhibited	35 - 37°C	18 - 24 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Luxuriant	35 - 37°C	18 - 24 Hours
<i>Escherichia coli</i>	25922	50-100	None-poor	35 - 37°C	18 - 24 Hours
<i>Pseudomonas aeruginosa</i>	27853	$\geq 10^3$	Inhibited	35 - 37°C	18 - 24 Hours
<i>Staphylococcus aureus</i>	25923	50-100	None-poor	35 - 37°C	18 - 24 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Luxuriant	35 - 37°C	18 - 24 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Pike R.M., 1945, Am. J. Hyg., 41:211.
2. Facklam and Carly, 1985, Manual of Clinical Microbiology, Lennette and others (Eds.), 4th ed., ASM, Washington D.C.
3. Welch D.F. et al, 1991, Am. J. Clin. Pathol., 95:587.





NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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