

INTENDED USE

Pro-Lab *Streptococcus* Selective Supplement is an antibiotic supplement used to enhance the isolation of streptococci.

SUMMARY AND EXPLANATION

Haemolytic streptococci, in particular the group A streptococci (*Streptococcus pyogenes*), are the most frequent streptococcal pathogens for man. The isolation of streptococci is inhibited by the presence of a large number of commensal organisms, therefore selective culture techniques are recommended for isolation of streptococci.

One widely used method of isolation of *Streptococcus pyogenes* was the use of a medium containing nalidixic acid, neomycin and polymyxin B (Lowbury, Kidson and Lilly, 1964¹; Vincent, Gibbons and Gaafar, 1971²). However, there was an emergence of strains of other gram-positive organisms (staphylococci and coryneform organisms) resistant to these antibiotics.

A new medium utilizing colistin sulphate (10 mg/liter) and oxolinic acid (5 mg/liter) was developed by Petts (1984)³. The use of these two selective agents results in the inhibition of gram-negative and most non-streptococcal gram-positive organisms. Growth of streptococci is comparable to growth on non-selective media although *Streptococcus faecalis* (Group D) colonies may show a size reduction.

DESCRIPTION

Accurate quantities of colistin sulphate and oxolinic acid are lyophilized and provided in individually labelled vials, each vial being sufficient to supplement 1000 mls of prepared medium.

FORMULA

Each vial contains:

Colistin sulphate	10 mg
Oxolinic acid	5 mg

PROCEDURE

To reconstitute each vial of Pro-Lab *Streptococcus* Selective Supplement, aseptically, add 10 ml of sterile distilled water and gently agitate to assist reconstitution.

Prepare Columbia Agar or Blood Agar according to the manufacturer's instructions, autoclave and cool to 50°C. Add 5 to 7% sterile defibrinated horse blood and mix thoroughly. Add the reconstituted contents of one vial of Pro-Lab *Streptococcus* Selective Supplement to a final 1000 ml prepared medium. Mix gently and pour into sterile petri plates. Overnight storage at 4°C is recommended to allow suitable equilibration. For extended storage at 4°C, eg. up to 7 days, plates should be contained in sealed plastic sleeves or similar packaging.

IN USE

1. Before using selective medium ensure that plates are dry.
2. Inoculate test material onto surface of agar using sterile inoculating loop (available from Pro-Lab) or a sterile swab in such a manner as to encourage the growth of isolated colonies.
3. Incubate plates at 37°C, either aerobically or anaerobically.
4. Examine after incubation (18 to 24 hours).

SAFETY PRECAUTIONS

1. Pro-Lab *Streptococcus* Selective Supplement is offered only as an in vitro material and is in no way intended for a curative or prophylactic purpose.
2. During and after use, handle all materials in a manner conforming to Good Laboratory Practices and consider at all times that materials under test should be regarded as a potential biohazard if mishandled.

PRESENTATION

Pro-Lab *Streptococcus* Selective Supplement PL. 570 is supplied 10 vials per box (lyophilized).

STORAGE

Pro-Lab *Streptococcus* Selective Supplement PL. 570 must be stored at 4°C to 8°C. Kept under these conditions it may be used up to date of expiry shown on product label.

REFERENCES

1. **Lowbury, E.J.L., Kidson, A. and Lilly, H.A.** (1964). J. Clin. Path. 17: 231-235.
2. **Vincent, W.F., Gibbons, W.E. and Gafaar, H.A.** (1971). Appl. Micro. 22: 942-943.
3. **Petts, D.N.** (1984). J. Clin. Microbiol. 19: 4-7.

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