

NALIDIXIC ACID SUPPLEMENT

FOR IN VITRO DIAGNOSTIC USE

INTENDED USE

PRO-LAB Nalidixic Acid Supplement is an antibiotic supplement used for the selective isolation of Gram positive anaerobes.

SUMMARY AND EXPLANATION

In recent years the number of anaerobic organisms isolated from clinical specimens has increased significantly. This has mainly been due to more widespread use of selective media and has led to a greater awareness of the importance of anaerobic infections. Revisions in anaerobic techniques¹ and the usefulness of a number of media for different anaerobic species have been reported².

Ingham et al. (1978)³ recommended the use of nalidixic acid for the selection of non-sporing anaerobes. More recently, Wren (1980)⁴ compared the usefulness of a number of anaerobic selective media. For the isolation of Gram positive anaerobes, nalidixic acid (10mg/litre)-Tween agar achieved the best results, except with clostridia.

DESCRIPTION

An accurate quantity of nalidixic acid is lyophilized and provided in individually labelled vials. Each vial is sufficient to supplement 1000 mls of prepared media.

FORMULA

Each vial contains: Nalidixic acid 10 mg

PROCEDURE

To reconstitute each vial of PRO-LAB Nalidixic Acid Supplement add, aseptically, 10 ml of sterile distilled water. After closing the vial, gently agitate to assist reconstitution. Prepare Columbia Agar, Brucella Agar or any other suitable medium of choice, according to the manufacturer's instructions. Add Tween 80 to the reconstituted medium to a 0.1% (v/v) final concentration.

Autoclave the medium and cool to 55°C. Add the reconstituted contents of one vial of PRO-LAB Nalidixic Acid Supplement to a final 1000 ml prepared medium. Mix gently.

Supplement the medium with 5-7% defibrinated horse blood. Other growth factors, such as haemin and menadione, may also be added as required. Mix the medium thoroughly and pour into sterile petri dishes. 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 the 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 anaerobically in an anaerobic jar or cabinet at 37°C.
- 4. Examine plates after 48 hours, but continue incubation for up 5 days.

SAFETY PRECAUTIONS

- 1. PRO-LAB Nalidixic Acid 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 Practice and consider at all times that material under test should be regarded as a potential biohazard if mishandled.

PRESENTATION

PRO-LAB Nalidixic Acid Supplement is supplied 10 vials per box (lyophilized).

STORAGE

PRO-LAB Nalidixic Acid Supplement must be stored at 2° to 8°C. Kept under these conditions it may be used up to date of expiry shown on product label.

REFERENCES

- 1. Wren, M.W.D., Baldwin, A.W.F., Elden, C.P. and Sanderson, P.J. 1971. J. Med. Microbiol. 10: 49-61.
- 2. Finegold, S.M., Sugihara, P.T. and Sutter, V.L. 1971. Soc. Appl. Bact. Tech. Ser. No. 5: 99-108.
- 3. Ingram, H.P., Dutton, J., Sisson, P.R., Sprott, M.S. and Selkon, J.B. 1978. J. Clin. Pathol. 31: 806-807.
- 4. Wren, M.W.D. 1980. J. Clin. Pathol. 33: 61-65.

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