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49862 Nitrocefin disks

For the rapid detection of β-lactamase enzymes in isolated colonies *of Neisseria gonorrhoeae*, *Moraxella catarrhalis*, *Staphylococcus spp*., *Haemophilus influenzae* and anaerobic bacteria.

Composition:
(1 package contains 50 disks in a light resistant plastic vial.)
6mm diameter filter paper disks impregnated with Nitrocefin.

Storage:
Store in the freezer below -10°C in the containers provided. Allow to equilibrate to room temperature before opening then return to freezer storage immediately after use.

Directions:
Place the required number of Nitrocefin disks into a clean empty Petri dish or onto a microscope slide.
Disks may be moistened with one drop of deionised water. Do not over-moisten.
Using a sterile loop or applicator stick remove several well-isolated and similar colonies and smear onto the surface of a disk. Alternatively: moisten the disk with one drop of deionised water, then holding the disk in forceps, wipe across a colony on an agar plate.
Observe the inoculated disk for the development of a red colour.

Interpretation of results:
Positive - Development of a red colour in the area of the disk where the culture was applied. Note the colour change does not normally develop over the whole of the disk.
Negative - No colour change.

A positive result should be interpreted as resistance to penicillin or cephalosporin activity. Susceptibility should be confirmed by standard growth-dependent susceptibility testing methods. Negative results imply but do not guarantee susceptibility.

Quality control:
The list below illustrates a range of performance control strains in routine use:

Test Organisms (ATCC)	Result
Haemophilus influenzae (35036)	positive
Neisseria gonorrhoeae (31426)	positive
Staphylococcus aureus (11632)	positive
Escherichia coli (25922)	negative

User quality control:
Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate a positive reaction and at least one organism to demonstrate a negative reaction. Do not use the product if the reactions with the control organisms are incorrect.

Limitations:
It is recommended that biochemical and/or serological tests are performed on colonies from pure culture to confirm identification.

For most bacterial strains a positive results will develop within 5 minutes. However, positive reactions for some staphylococci and anaerobic species may take up to 60 minutes to develop.

Detection of staphylococcal β-lactamase is enhanced by testing growth from a medium containing sub-inhibitory concentrations of a β-lactam antibiotic .

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References:

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