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MAST ID™ NITROCEFIN DISCS

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

The ability of certain bacteria to produce enzymes that inactivate β -lactam antibiotics i.e. penicillins and cephalosporins has long been recognised. Several clinical tests have been developed to detect β -lactamase enzymes. They include the iodometric method, the acidometric method and the use of a variety of chromogenic substrates. Nitrocefin is a chromogenic cephalosporin that has been found to be effective in detection of all known β -lactamase enzymes. β -lactamase enzymes hydrolyse the amide bond in the β -lactam ring of Nitrocefin resulting in a distinctive colour change from yellow to red.

Rapid β -lactamase tests can yield clinically relevant information earlier than an MIC test or disc diffusion test. MAST ID Nitrocefin discs are intended for use in the rapid testing of isolated colonies of *Neisseria gonorrhoeae*, *Moraxella catarrhalis*, *Staphylococcus* spp., *Haemophilus influenzae* and anaerobic bacteria, notably *Bacteroides* spp. 12. This is because organisms within a taxonomic group or even a single strain may produce a diversity of β -lactamase enzymes with different substrate specificities. Nitrocefin is the only reliable test for detecting β -lactamase producing *Enterococcus* spp.

Easy to use

Smear colony onto surface of moistened disc

Convenient

 Tests can be performed using either clean Petri dish or glass slide

Cost effective

No additional reagents required

Definable end point

Colour change from yellow to red