# Product Name : Beta Lactamase Stick

Rapid test in stick for the detection of beta-lactamase.

## CONTENT OF THE PACKAGES

## DESCRIPTION

Beta Lactamase Stick is a rapid test in stick for the detection of resistance to ampicillin-penicillin due to the production of betalactamases by Gram positive and Gram negative microorganisms.

Nitrocefin is a chromogenic cefalosporin (3-(2,4 dinitrostyrl) - 6R, 7R) -7-(2 thienylacetamido)-ceph-3-em-4 carboxylic acid, E-isomer) which rapidly turns from yellow to red as the amide bond in the beta-lactam ring is hydrolysed by beta-lactamases; it is sensitive to hydrolysis by all known lactamases produced by Gram positive and Gram negative microorganisms.

#### USE

- Remove the container from the freezer and allow it to reach room temperature.
- Remove one stick from the container and the colony.
- Touch a well isolated colony from the primary isolation medium with a sterile loop and streak it onto the paper on the stick.
- Place the inoculated tip of the stick between the lid and the base of the inverted plate. The reaction requires moisture.

It is therefore necessary to increase moisture inside the plate, or directly moisten the paper on the stick.

## INTERPRETATION OF THE RESULTS

Interpret the results according to the table; Observe the result up to a maximum of 5 minutes and, if negative, observe again after 15 minutes. Some Staphylococci can take also 1 hour before determining a color change.

**Color of the Stick** 

Beta Lactamase Stick

No color change

pink/ red color

# Positive

Negative



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## QUALITY CONTROL

Microbiological control;

Microorganism		Result	<b>Result Time</b>
Staphylococcus aureus	ATCC 29213	+	1 h
Haemophilus influenzae	ATCC 35036	+	1 min
Neisseria gonhorroeae	ATCC 31426	+	1 min
Escherichia coli	ATCC 25922	-	1 min

### PRECAUTIONS

The Beta Lactamase Stick is not classified as hazardous by current legislation. Beta Lactamase Stick is disposable, designed for professional use and must be used in a laboratory by suitably trained operators using approved aseptic and safety methods for dealing with pathogenic agents.

### STORAGE

Keep Beta Lactamase Stick at -20°C in their original packaging protected from sunlight. Keep them away from sources of heat. In these conditions, Beta Lactamase Stick are valid until the expiry date shown on the label. Do not use them beyond that date. Dispose of them if they show signs of deterioration (sticks changes color).

## ELIMINATING USED MATERIAL

After use, Beta Lactamase Stick and the material that has come into contact with the sample must be decontaminated and disposed of in accordance with the laboratory procedures for the decontamination and disposal of potentially infected material.

#### REFERENCES

- O'Callaghan C.H., et al. (1972) Antimicrob. Ag. & Chemother. 1.283-288.
- Shannon K. and Phillips I. (1980) J. Antimicrob. Chemother. 6.617-621.

### PACKAGING

Cat. No : MB-88033 Beta Lactamase Stick

30 sticks

