80489 β-Lactamase Strips

β- Lactamase Strips are test strips for the rapid acidimetric detection of the β-lactamase activity of microorganisms. The test is based on hydrolysis of the β-lactam ring in benzylpenicillin, which results in the production of penicilloic acid. This process causes acidification of the bacterial suspension and changes the colour of the acidobasic indicator. The acidobasic test for β-lactamase activity is suitable only for the detection of *Haemophilus influenzae*, *Neisseria gonorrhoeae* and *Staphylococcus spp*. This test is not suitable for the detection of the β-lactamase activity of other microorganisms (*Branhamella catarrhalis*, *Enteroccocus faecalis*, *Neisseria meningitis*, *Enterococcus spp.* and others).

Composition:

(1 package contains 100 test strips)

Plastic strips with an active zone saturated with benzylpenicillin and an acidobasic indicator (Cat. No. 56348)	100 pcs
Moistening solution (Cat. No. 23134)	70 mL

Storage:

Store dry at +2 to +8°C. Expiration can be prolonged when stored at –20°C.

Directions:

Strip Test:

1. Moisten the function zone of diagnostic strip with 10 ul of the Moistening solution.
2. Wipe off several suspect colonies from a Petri dish by the function zone of diagnostic strip.
3. Mark the strip and incubate at room temerature.
4. Read result after 2-10 minutes.

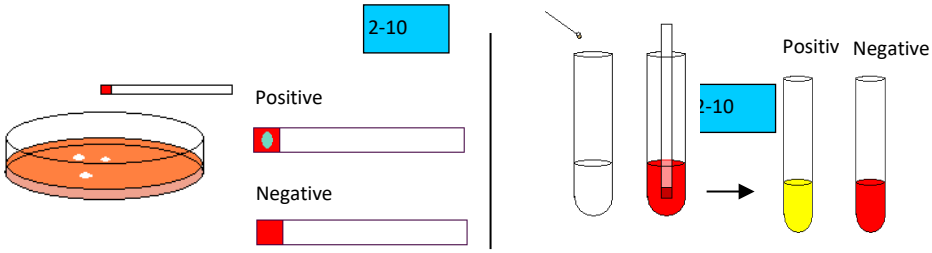
Test Tube Test:

1. Prepare approximately 0.5-1 ml of bacterial suspension of examined microorganism in the Moistening solution (2-4 loops).
2. Insert test strip in test tube with prepared bacterial suspension, shake and incubate at room temperature.
3. Read result after 2-10 minutes.

Interpretation of results:

Negative reaction: solution remains red or no colour change develops at the position of wiped colony.

Positive reaction: solution turns yellow or a blue-green spot develops at the position of wiped colony.



References:
1. R. Bonnet, C. Chanal, E. Ageron et al., Inducible AmpC {beta}-Lactamase of a New Member Enterobacteriaceae, Antimicrob. Agents Chemother., 46, 3316 (2002)
2. L. Shan, et al., Kinetic analysis of an inhibitor-resistant variant of the OHIO-1 β-lactamase, an SHV-family class A enzyme, Biochem. J., 333, 395, Printed in Great Britain (1998)

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.