

BIOLACTAM®

An innovative in vitro diagnostic for the **rapid quantitative determination of β -lactamase activity**

VALUE POTENTIAL OF BIOLACTAM®

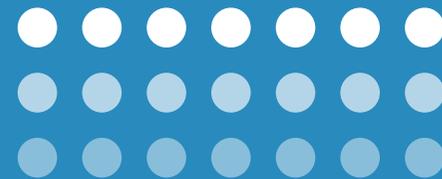
β -lactam antibiotics, e.g. penicillins and cephalosporins, are still the most widely used medicinal products for first line therapy of infectious diseases. Insufficient efficacy of β -lactam antibiotics is caused by natural or acquired resistance mainly due to degradation of the active substance by bacterial β -lactamases. In addition, high endogenous β -lactamase levels in individual patients may impair the efficacy of β -lactam antibiotics.

BIOLACTAM® is a versatile assay for the clinical routine and emergency diagnosis of a variety of infections, e.g. of the respiratory and urinary tract, CNS, ENT, as well as dental and gynaecological infections. The use of BIOLACTAM® will help to reduce treatment time and costs, ease the process of resistance detection and may save numerous lives while ensuring the future effectiveness of current antibiotics.

If you have any questions, do not hesitate to contact our professional team to discuss your special needs in detail. Orders may be submitted by fax or email.



VL-Diagnostics



VL-Diagnostics GmbH
Deutscher Platz 5b
04103 Leipzig, Germany

Phone: +49 (0) 341 96278414
Fax: +49 (0) 341 96278415
Mail: info@vl-diagnostics.de
Web: www.biolactam.de



BIOLACTAM[®]

- is a recently developed colorimetric assay that allows rapid quantification of β -lactamase activity directly in biological samples
- β -lactamase activity can be determined in a variety of biological samples such as blood serum, sputum, cerebrospinal fluid and bacterial suspensions
- the procedure is simple and rapid
- the results indicate at the start of drug treatment whether antibiotic therapy with a β -lactam antibiotic is useful
- is an in vitro diagnostic according to IVDD 98/79/EC



Motivation for use

- rapid detection of therapy failure due to β -lactamase activity in patients
- optimizing already initial therapy by revealing presumed inefficacy of β -lactam antibiotics due to β -lactamase activity
- minimizing development of antibiotic resistance by target-directed therapy

Advantages and unique features

- does not demand a bacterial culture - no bacteriological laboratory needed
- offers quick and reliable results (1.5 to 3 hours)
- determination of combined β -lactamase activity (microbiological and endogenous)
- quantitative results provide threshold values for adequate and target-directed therapy

Testing principle

- β -lactamases inactivate β -lactam antibiotics with the consequence of impaired or insufficient therapeutic efficacy
- BIOLACTAM[®] allows quantification of β -lactamase activity photometrically
- the assay consists of three components (nitrocefim, phosphate buffer and penicillinase) and needs only few additionally materials (e.g. microplate reader, clear flat-bottom 96-well plate, etc.)
- a standard kit allows testing of 20 samples and includes reliable controls

