

Beta-Lactamase Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 15720

Size: 100ug or 500ug Protein G-purified antibody in PBS, pH 7.4.

BACKGROUND

The beta-lactam antibiotics (penicillins and cephalosporins) are the most frequently used antimicrobial agents. All of the beta-lactams are structurally related through the presence of a core beta-lactam ring. Bacterial resistance to beta-lactams continues to increase, primarily due to microbial production of beta-lactamases. Beta-lactamases catalyze the hydrolysis of the beta-lactam bond which destroys anti-bacterial activity. Bacteria that produce TEM- or SHV-type beta-lactamases have point mutations in structural genes that have extended the substrate specificity of these beta-lactamases. As a result, many of the beta-lactamase-producing Gram-negative bacteria have become multi-drug resistant.

SPECIFICATION SUMMARY

Antigen: 5'-His-tagged *E. coli* 205 TEM-1 R+ beta-lactamase

Sequence:

MSIQHFRVAL IPFFAAFLCLP VFAHPETLVK VKDAEDQLGA RVGYIELDLN SGKILESFRP
EERFPMMSTF KVLGCGAVLS RVDAGQEQLG RRIHYSQNDL VEYSPVTEKH LTDGMTVREL
CSAAITMSDN TAANLLTTI GGPKELTAFL HNMGDHVTRL DRWEPELNEA IPNDERDTTM
PAAMATTLRK LLTGELLTLA SRQQLIDWME ADKVAGPLLR SALPAGWFIA DKSGAGERGS
RGIIAALGPD GKPSRIVVIY TTGSQATMDE RNRQIAEIGA SLIKHW

Accession no.: P62593

Host Species: Mouse

Clone no.: 8A5.A10

Antibody Subtype: IgG1

Specificity: This antibody recognizes TEM-1-type beta-lactamases.

APPLICATIONS

Immunoblotting: use at 10ug/ml. Predicted molecular weight ~29kDa.

ELISA: use at 10-20ug/ml (optimized for immobilized beta-lactamase at 10ug/ml).

Endusers should determine optimal concentrations for their applications.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

This product is stable for at least one (1) year at -20°C. Store in appropriate aliquots to avoid multiple freeze-thaw cycles.

For in vitro investigational use only. Not intended for use in therapeutic or diagnostic procedures.