



## Product Datasheet

<b>Product Name</b>	Beta Lactamase Recombinant
<b>Cata No</b>	CB500526
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	$\beta$ -Lactamase, EC 3.5.2.6, Cephalosporinase.

### Description

Beta-lactamase is a type of enzyme(EC3.5.2.6) produced by some bacteria that is responsible for their resistance to beta-lactam antibiotics like penicillins, cephalosporins, cephamycins and carbapenems. These antibiotics have a common element in their molecular structure: a four-atom ring known as a beta-lactam. The lactamase enzyme breaks that ring open, deactivating the molecule's antibacterial properties.

Beta-Lactamase Recombinant produced in *E. Coli* is a single, non-glycosylated polypeptide chain containing 263 amino acids and having a molecular mass of 29 kDa.

Beta Lactamase is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Biological Activity

3

### Purity

Greater than 90.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

### Formulation

Lyophilized from a concentrated (1 mg/ml) solution in water containing 20mM Phosphate buffer pH-7.

### Stability

Lyophilized Beta Lactamase although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Beta Lactamase Recombinant should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

### Sequence

MHPETLVK VKDAEDQLGA RVGYIELDLN  
SGKILESFRP EERFPMSTF KVLCCGAVLS  
RVDAGQEQLG RRIHYSQNDL VEYSPVTEKH  
LTDGMTVRELCSAAITMSDN TAANLLTTI  
GGPKELTAFL HNMGDHVTRL DRWEPELNEA  
IPNDERDTTM PAAMATTLRK LLTGELLTLA  
SRQQLIDWME ADKVAGPLLR SALPAGWFIA  
DKSGAGERGS RGIIAALGPD GKPSRIVVIY  
TTGSQATMDE RNRQIAEIGA SLIKHW