

Recombinant E.coli Beta-lactamase protein

Catalog Number: ATGP3575

PRODUCT INFORMATION

Expression system

E.coli

Domain

20-377aa

UniProt No.

P00811

NCBI Accession No.

NP_418574

Alternative Names

ampC, ampA, Cephalosporinase

PRODUCT SPECIFICATION

Molecular Weight

41.8 kDa (379aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Purity

> 95% by SDS-PAGE

Biological Activity

Specific activity is >700unit/mg, in which One unit will hydrolyze 1.0umole of Nitrocefin per minute at pH 7.0 at 37C

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

AmpC, also known as Beta-lactamase, is the most widespread resistance mechanism to beta-lactam antibiotics, such as the penicillins and the cephalosporins. 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

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the molecule's antibacterial properties. Recombinant E. coli beta-lactamase protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

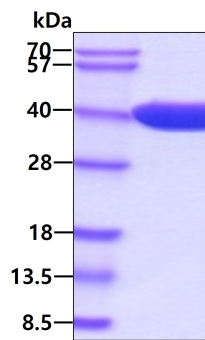
<MGSSHHHHHH SSGLVPRGSH M>APQQINDIV HRTITPLIEQ QKIPGMAVAV IYQGKPYFT WGYADIKKQ PVTQQTLFEL
GSVSKTFTGV LGGDAIARGE IKLSDPTTKY WPELTAKQWN GITLLHLATY TAGGLPLQVP DEVKSSDLL RFYQNWQPAW
APGTQRLYAN SSIGLFGALA VKPSGLSFEQ AMQTRVFQPL KLNHTWINVP PAEEKNYAWG YREGKAVHVS PGALDAEAYG
VKSTIEDMAR WVQSNLKPLD INEKLQQGI QLAQSRWQT GDMYQGLGWE MLDWPVNPDS IINGSDNKIA LAARPVKAIT
PPTPAVRASW VHKTGATGGF GSYVAFIEK ELGIVMLANK NYPNPARVDA AWQILNALQ

General References

Zhao Z., et al. (2015) Cancer Lett. 358(1):17-26.
Martin I., et al. (2014) Cell. 157(2):472-85.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.