

## OriGene Technologies Inc.

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## AR10478PU-S OriGene EU

OriGene EU Acris Antibodies GmbH

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## E. coli Beta Lactamase - Purified

Catalog No.:	AR10478PU-S
Quantity:	1 mg
Concentration:	1.0 mg/ml (prior to lyophil.)
Background:	Beta-lactamase is a type of enzyme(EC3.5.2.6) produced by some bacteria that is responsible for their resistanceto beta-lactam antibioticslike penicillins, cephalosporins, cephamycinsand carbapenems. These antibioticshave 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.
Uniprot ID:	<u>P62593</u>
NCBI:	<u>NP_943295.1</u>
GenelD:	<u>10076131</u>
Species:	E. coli
Source:	E. coli
Format:	<ul> <li>State: Sterile Filtered White lyophilized (freeze-dried) powder</li> <li>Purity: &gt;90.0% as determined by both RP-HPLC and SDS-PAGE analysis.</li> <li>Purification Method: Proprietary chromatographic techniques.</li> <li>Buffer System: Lyophilized from a concentrated (1 mg/ml) solution in water containing 20mM Phosphate buffer pH 7</li> <li>Reconstitution: Restore in sterile 18MΩ-cm<sup>-1</sup> H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.</li> </ul>
Description:	Recombinant Beta-Lactamase produced in <i>E.coli</i> is a single, non-glycosylated polypeptide chain containing 263 amino acids. <b>AA Sequence:</b> MHPETLVK VKDAEDQLGA RVGYIELDLN SGKILESFRP EERFPMMSTF KVLLCGAVLS RVDAGQEQLG RRIHYSQNDL VEYSPVTEKH LTDGMTVRELCSAAITMSDN TAANLLLTTI GGPKELTAFL HNMGDHVTRL DRWEPELNEA IPNDERDTTM PAAMATTLRK LLTGELLTLA SRQQLIDWME ADKVAGPLLR SALPAGWFIA DKSGAGERGS RGIIAALGPD GKPSRIVVIY TTGSQATMDE RNRQIAEIGA SLIKHW <b>Specific Activity:</b> 1,500IU/mg. <b>Unit Definition:</b> One unit will hydrolyze 1.0 μmole of indicated substrate per min at pH 7.0 at 25°C. The International Unit (using Benzylpenicillin as substrate) is approximately equal to 600 Levy or 75 Pollock units. <b>Molecular weight:</b> 29 kDa

Acris Antibodies is now part of the OriGene family. Learn more at www.origene.com



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Storage:

AR10478PU-S: E. coli Beta Lactamase - Purified

Prior to reconstitution store at 2-8°C for one month or desiccated below -18°C. Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**For research and in vitro use only. Not for diagnostic or therapeutic work.** Material Safety Datasheets are available at www.acris-antibodies.com or on request. Acris Antibodies is now part of the OriGene family. Learn more at www.origene.com



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