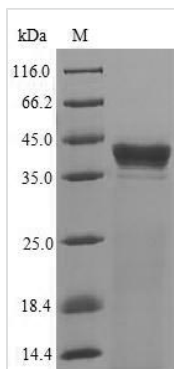




Recombinant Clostridium botulinum ATP-dependent Clp protease proteolytic subunit (clpP)

Product Code	CSB-EP401627CWV
Relevance	Cleaves peptides in various proteins in a process that requires ATP hydrolysis. Has a chymotrypsin-like activity. Plays a major role in the degradation of misfolded proteins. Hydrolysis of proteins to small peptides in the presence of ATP and magnesium. Alpha-casein is the usual test substrate. In the absence of ATP, only oligopeptides shorter than five residues are hydrolyzed (such as succinyl-Leu-Tyr- -NHMe; and Leu-Tyr-Leu- -Tyr-Trp, in which cleavage of the -Tyr- -Leu- and -Tyr- -Trp bonds also occurs).
Abbreviation	Recombinant Clostridium botulinum clpP protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	A5I6W1
Alias	Endopeptidase Clp
Product Type	Recombinant Protein
Immunogen Species	Clostridium botulinum (strain Hall / ATCC 3502 / NCTC 13319 / Type A)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MSLVPVVVEQTNRGERSYDIYSRLLKDRIIMLSEEVNDTTASLIVAQLLFLEAED PDKDIHLYINSPGGSITSGMAIYDTMQYIKPDVSTICVGMAASMGAFLLAAGAK GKRYALPNSEVMIHQPLGGFRGQATDIGIHAERILKMKKLNTILSDRTGKPLE QVELDTERDHFLSAEEAKEYGLIDEVIDKKK
Research Area	Microbiology
Source	E.coli
Target Names	clpP
Expression Region	1-194aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	37.5kDa
Protein Length	Full Length
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Enhance your microbiology research with our Recombinant Clostridium botulinum ATP-dependent Clp Protease Proteolytic Subunit, a crucial component of the Clp protease system involved in protein quality control and stress response in this pathogenic bacterium. Sourced from Clostridium botulinum (strain Hall / ATCC 3502 / NCTC 13319 / Type A), this recombinant protein is produced in E. coli for consistent quality and performance in your research applications.

Our Recombinant Clostridium botulinum ClpP protein provides the full length of the proteolytic subunit, with an expression region of 1-194aa, ensuring comprehensive functionality for your studies. The N-terminal 6xHis-SUMO-tag facilitates seamless purification and detection while preserving the protein's biological activity. With greater than 90% purity as determined by SDS-PAGE, our Recombinant Clostridium botulinum ClpP protein guarantees exceptional quality for your experiments.

Available as a lyophilized powder for convenient storage and reconstitution, the Recombinant Clostridium botulinum ATP-dependent Clp Protease Proteolytic Subunit is an outstanding choice for researchers exploring the intricate processes of protein degradation and stress response in this notorious bacterium. Trust our high-quality ClpP protein to elevate your research in the field of microbiology.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.