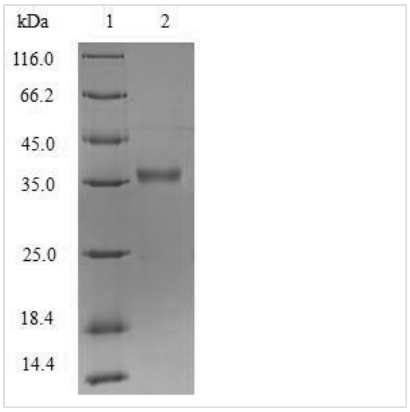
Recombinant Pseudomonas aeruginosa Protease LasA (lasA)

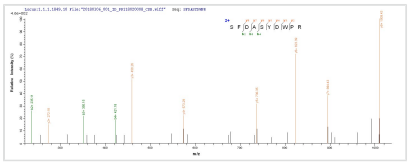
Product Code	CSB-EP318588EZX
Relevance	Involved in proteolysis and elastolysis (degradation of the host protein elastin). Has staphylolytic activity (degrades pentaglycine cross-links in cell wall peptidogylcan), preferring Gly-Gly-|-X substrates where X is Ala or Gly (PubMed:11179971). Enhances the elastolytic but not proteolytic activity of elastase (lasB) and elastolytic activity of other proteases (PubMed:2110137). Degradation of host elastin is likely to contribute to the pathogenicity of P.aeruginosa. While either His-317 or His-356 can abstract a proton in the hydrolysis reaction, the same residue performs both functions in a given catalytic cycle, with the other stabilizing the catalytic intermediate
Abbreviation	Recombinant Pseudomonas aeruginosa lasA 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.	P14789
Alias	Staphylolytic protease
Product Type	Recombinant Protein
Immunogen Species	Pseudomonas aeruginosa (strain ATCC 15692 / PAO1 / 1C / PRS 101 / LMG 12228)
Purity	≥ 90% as determined by SDS-PAGE.
Sequence	APPSNLMQLPWRQGYSWQPNGAHSNTGSGYPYSSFDASYDWPRWGSATYS VVAAHAGTVRVLSRCQVRVTHPSGWATNYYHMDQIQVSNGQQVSADTKLGV YAGNINTALCEGGSSTGPHLHFSLLYNGAFVSLQGASFGPYRINVGTSNYDND CRRYYFYNQSAGTTHCAFRPLYNPGLAL
Research Area	others
Source	E.coli
Target Names	lasA
Protein Names	Recommended name: Protease lasA EC= 3.4.24.-Alternative name(s): Staphylolytic protease
Expression Region	237-418aa
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	36.0kDa

Protein Length Full Length of Mature Protein

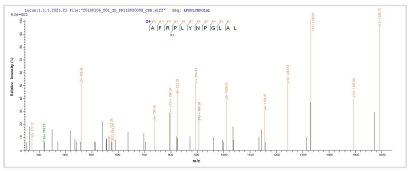
Image



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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP318588EZX could indicate that this peptide derived from E.coli-expressed Pseudomonas aeruginosa (strain ATCC 15692 / PAO1 / 1C / PRS 101 / LMG 12228) lasA.



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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.
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