

Ulp1 (SUMO Protease/Ulp1 peptidase)

Cat #: PRP3001

Size: 500 U/1000 U/5000 U

Product Information

	Product Name: Ulp1 (SUMO Protease/Ulp1 peptidase)		
REF	Catalog Number: PRP3001	LOT	Lot Number: Refer to product label
	Purity: > 90% as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: E.coli
	Shipping: The product is shipped at ambient temperature		

Background: SUMO (Small Ubiquitin-like MOdifiers) Protease 1 (Ulp1, Ubl-specific protease 1 from *Saccharomyces cerevisiae*) is a highly active cysteine protease. It is highly specific as it recognizes the tertiary structure of the ubiquitin-like (UBL) protein, SUMO (Smt3), rather than its amino acid sequence. SUMO fusion tag, as an N-terminal fusion partner, has been shown to enhance functional protein production in prokaryotic and eukaryotic expression systems with significantly improved protein stability and solubility.

Sequence: Amino acid sequence derived from ULP1 isoform (Q02724) (403-621 aa + N-terminal Poly-6*His tag C-terminal Poly-6*His tag) was expressed.

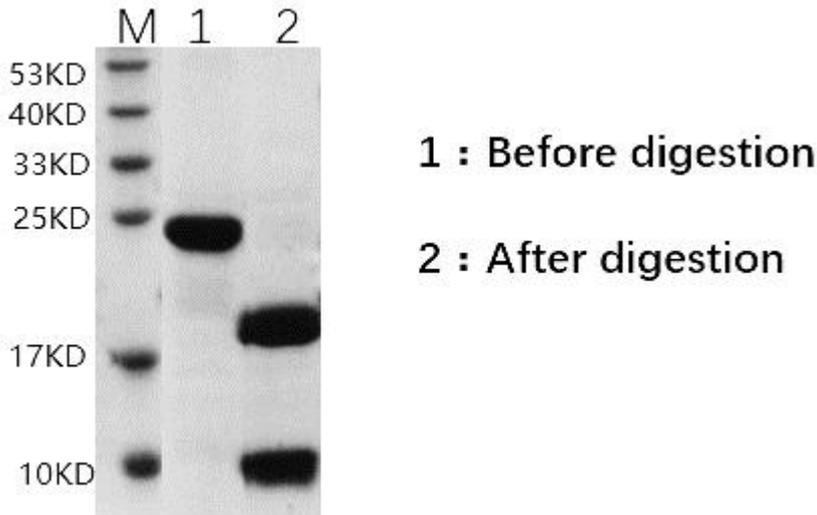
Protein length: The recombinant human ULP1 consists of 219 amino acids and has a predicted molecular mass of 28.7 kDa. The apparent molecular mass of the ULP1 is approximately 28 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Unit Definition: One unit of SUMO Protease is defined as the amount of enzyme needed to cleave 85% of 2 µg of substrate protein at 30°C in one hour.

Enzyme digestion conditions: 4°C enzyme digestion overnight is recommended, users can explore according to their own research target protein. After digestion, a small amount of samples can be taken for SDS-PAGE analysis. To remove the Ulp1 in the digested system, use His tag purification resin affinity chromatography.

Usagenotes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized ULP1 to 5 U/ μ L using the buffer we provided, which can then be further diluted to other aqueous solutions.

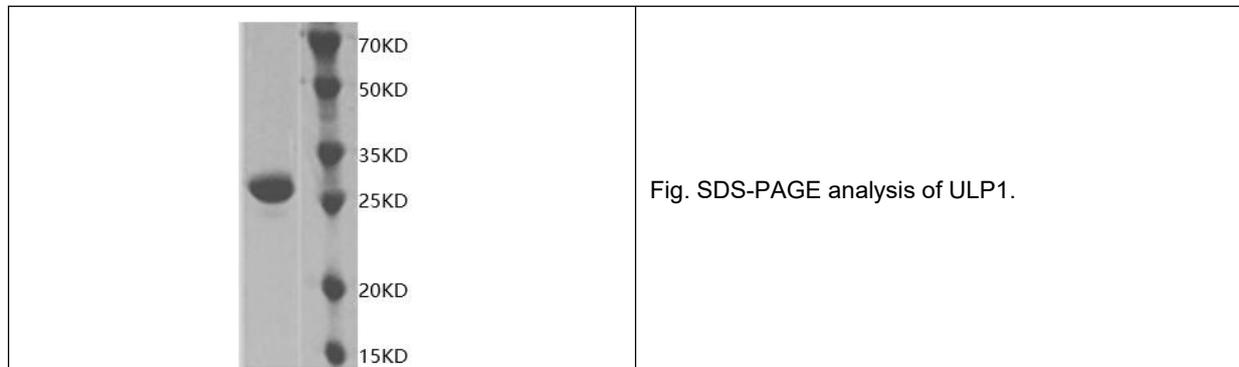
Fusion Protein	20 μ g
10 \times SUMO Protease Buffer	2 μ L
SUMO Protease (10 units)	2 μ L
Total volume	1000 μ L



(Note:10 \times SUMO Protease Buffer includes 500 mM Tris, 2% NP-40, 10 mM DTT; pH8.0)

Formulation: Lyophilized from sterile 20 mM Tris, 500 mM NaCl pH 8.0.

Storage Instructions: Lyophilized ULP1 protein product should be stored desiccated below -20 $^{\circ}$ C. Please prevent freeze-thaw cycles.



Note: The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.