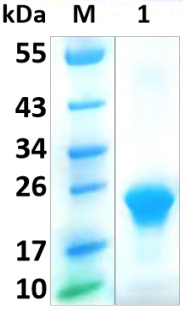
# SUMO protease（Ulp1）protein, Recombinant

## I. For sale

| Product name | Catalog # | Size |
|---|---|---|
| SUMO protease（Ulp1）protein, Recombinant | PGEU0001 | 10ug |
| | | 50ug |
| | | 100ug |
| | | 1mg |

## II. Product Description

| | |
|---|---|
| Other Names | NIB1; Ulp1; |
| Protein & NCBI Number | Q02724、 NM_001183834.1 |
| Host | E.coli |
| Express Region | 401-621aa |
| Protein Length | 230aa (including Tag) |
| Protein Sequence | MKKLVPELNEKDDDQVQKALASRENTQLMNRDNIEITVRDFKTLAPRRWLNDTIIEFF MKYIEKSTPNTVAFNSFFYTNLSERGYQGVRRWMKRKKTQIDKLDKIFTPINLNQSHW ALGIIDLKKKTIGYVDSLSNGPNAMSFAILTDLQKYVMEESKHTIGEDFDLIHLDCPQQP NGYDCGIYVCMNTLYGSADAPLDFDYKDAIRMRRFIAHLILTDALKLEHHHHHH |
| Molecular Weight | About 26.9kDa |
| Fusion Tag | 6×His （C-terminus） |
| Purity | ≥95% SDS-PAGE |
| Physical Property | liquid or lyophilized powder |
| Reconstitution | Storage solution: We recommend using PBS or a suitable solvent according to the experimental requirements to prepare 1mg/mL storage solution, aliquot and store at -20 °C.<br>Working solution: According to the experimental requirement, dilute Storage solution. The working solution can be stored at 4°C for 2-3 weeks after dilution. |
| Storage & Stability | The shelf life of liquid form is 6 months stored at -20 °C /-80 °C.<br>The shelf life of lyophilized form is 12 months stored at -20 °C /-80 °C. |
| Applications | Antibody preparation, immunoassay (ELISA, WB), Cleaves the SUMO tag at the N terminus of the fusion protein, etc. |
| Lead Time | 5 to 10 business days;<br>2 to 3 days for stock products |
| Figure. SDS-PAGE |  <br>12% Tris-Gly SDS-PAGE |

III. **Storage and Transportation**

Product is stable for up to twelve months from date of receipt under sterile conditions at -20℃ to -80℃. For optimal storage the lyophilized powder and protein stock solution should be aliquoted, and avoid freeze-thaw cycles.

IV. **Background**

ULP1 also known as Ubiquitin-like-specific protease 1， Smt3-protein conjugate proteinase,Ulp1 endopeptidase, it is mainly sourced Saccharomyces cerevisiae (strain ATCC 204508/S288c), it includes three domains: ULP1, Peptidase-C48 and PLN03189.

Catalytic Activity: Hydrolysis of the alpha-linked peptide bond in the sequence Gly-Gly-|-Ala-Thr-Tyr at the C-terminal end of the small ubiquitin-like modifier (SUMO) propeptide, Smt3, leading to the mature form of the protein. A second reaction involves the cleavage of an epsilon-linked peptide bond between the C-terminal glycine of the mature SUMO and the lysine epsilon-amino group of the target protein

V. **References**

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3. Taylor DL, Ho JC, Oliver A, Watts FZ (March 2002). "Cell-cycle-dependent localisation of Ulp1, a Schizosaccharomyces pombe Pmt3 (SUMO)-specific protease". Journal of Cell Science. 115 (Pt 6): 1113 – 22.

4. Li SJ, Hochstrasser M (March 2003). "The Ulp1 SUMO isopeptidase: distinct domains required for viability, nuclear envelope localization, and substrate specificity". The Journal of Cell Biology. 160 (7): 1069 – 81.

5. Ihara M, Koyama H, Uchimura Y, Saitoh H, Kikuchi A (June 2007). "Noncovalent binding of small ubiquitin-related modifier (SUMO) protease to SUMO is necessary for enzymatic activities and cell growth". The Journal of Biological Chemistry. 282 (22): 16465 – 75.

6. Mukhopadhyay D, Dasso M (June 2007). "Modification in reverse: the SUMO proteases". Trends in Biochemical Sciences. 32 (6): 286 – 95.）

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