SUMO Protease (ULP1) (Active)

Catalog Number	LDG0014RG
Package	2,500 U / Customized package

For full product information, images and publications, please visit our website.

Overview

Description

SUMO Protease (ULP1, Ubiquitin-like-specific protease 1) is a highly active cysteine protease derived from Saccharomyces cerevisiae. It has often been used as a biotechnological tool for cleavage affinity purification tags such as ubiquitinlike (UBL) protein, and SUMO from fusion proteins. ULP1 protease specifically recognizes the tertiary structure of SUMO rather than an amino acid sequence. ULP1 protease has a His-tag for easy removal from a cleavage reaction by using nickel affinity resins. Notably, the cleavage reactions are available in a buffer
containing 2 M urea.

Product Note

- SUMO Protease (ULP1) protease: target protein ratio of 1U:2 µg is used for most fusion protein cleavage. Cleavage efficiency may differ based on structure and properties of each target protein, we recommend testing several enzyme-to-substrate ratios, temperatures, and incubation times.
- SUMO Protease (ULP1) reactions can be performed in a buffer containing 2M urea.
- SUMO Protease (ULP1) reactions can be performed in a buffer which is optimal for the target protein. Salts (e.g., NaCl) can be added to 300 mM for cleavage efficiency evaluation.

Specifications

Expression System

Escherichia coli

Concentration

5 U/µL

Storage Buffer

SUMO Protease is supplied in 25 mM Tris-HCl, 250 mM NaCl, 0.05% NP-40, 0.25 mM DTT, 50% glycerol, pH 8.0.

Purity

>90% as determined by SDS-PAGE analysis.

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Unit Definition

One unit of SUMO Protease (ULP1) cleaves > 85% of 2 µg control substrate at 30°C for 1 h.

Endotoxin Level

<1 EU per 1 µg of the protein by the LAL method.

Form

Liquid

Instruction

Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

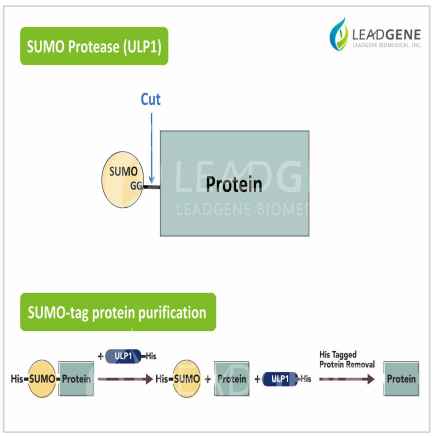
Stability & Storage

This product is stable after storage at:

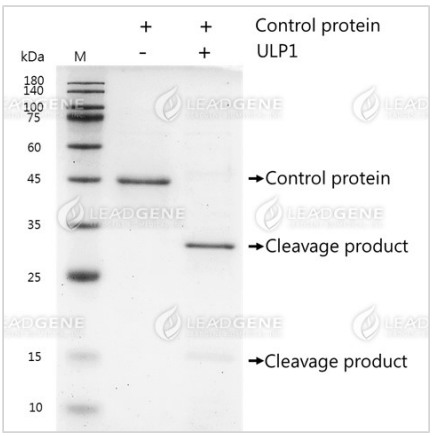
- -20°C or -80°C for 12 months under sterile conditions from date of receipt.

Avoid repeated freeze/thaw cycles.

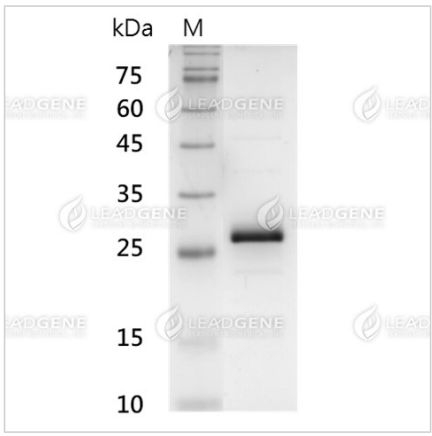
Image



SUMO Protease (ULP1) recognizes SUMO tertiary structure and cleaves at the C-terminal end of the Gly–Gly sequence in SUMO.



SUMO Protease (ULP1) cleavage of control protein.



SDS-PAGE analysis of recombinant SUMO Protease (ULP1)

Disclaimer : For Research Use or Further Manufacturing Only.

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