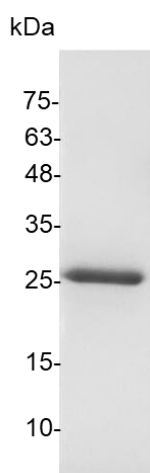


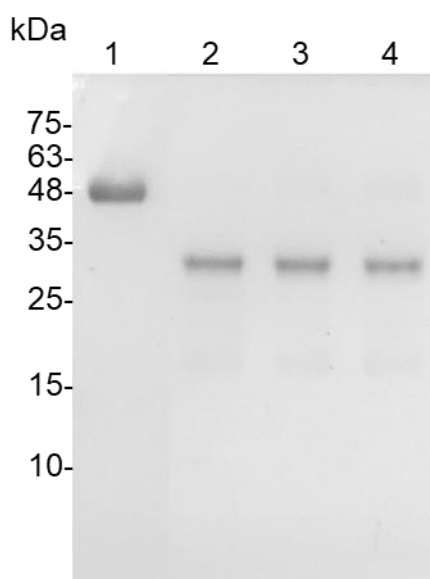
**SUMO-Specific Protease 2 (SEN2)**

v. 240101

<b>Catalog number</b>	C09010-100UG / C09010-1MG
<b>Package</b>	100 µg / 1 mg
<b>Description</b>	<p>SEN2 is an enzyme that belongs to the protease family C48. Structurally, SEN2 harbors the C48 catalytic domain which is typically located close to the C terminus and has been reported to engage two SUMO pathways. The first is cleavage processing of small ubiquitin-like modifiers (SUMO1, SUMO2, and SUMO3) propeptides, subsequently leading to protein maturation. The second is the cleavage processing of SUMO1, SUMO2, and SUMO3 from targeted proteins. SEN2 protease has a His-tag for easy removal from a cleavage reaction by using nickel affinity resins.</p>
<b>Expression System</b>	Escherichia coli
<b>Endotoxin level</b>	<1 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95% as determined by SDS-PAGE analysis.
<b>Form</b>	Liquid
<b>Storage Buffer</b>	55mM Tris-HCl, 165 mM NaCl, pH7.5
<b>Stability &amp; Storage</b>	<p>This product is stable after storage at:</p> <ul style="list-style-type: none"> <li>-20°C or -80°C long-term storage under sterile conditions.</li> </ul> <p>Avoid repeated freeze/thaw cycles.</p>



SDS-PAGE analysis of recombinant SUMO-Specific Protease 2 (SEN2).



SDS-PAGE analysis of substrate digested with SUMO-Specific Protease 2 (SEN2) in different ratio.  
Lane1: substrate only, Lane2: 1:25, Lane3: 1:50, Lane4: 1:100

#### Product Note

- Procedure:

1. To optimize cleavage conditions, it is recommended to run preliminary cleavage reactions at a small scale.
2. Dilute the target protein sample to 1-2 mg/mL with PBS solution.
3. An effective general range of the SEN2 protease: target protein ratio is 1  $\mu$ g :50  $\mu$ g.
4. Reaction can be performed at 4°C-37°C. 4°C is recommended as the starting standard. Incubate the reaction mixture at 4°C for 16 hours.
5. Determine cleavage level of the samples by SDS-PAGE analysis.
6. Once optimize for the cleavage condition, the cleavage reactions can be scaled up to cleave a large amount of the target fusion protein.

- SEN2 protease: target protein ratio of 1  $\mu$ g :50  $\mu$ g 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.

- We recommend performing longer cleavage time at lower temperatures (4°C) for cleavage efficiency.

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