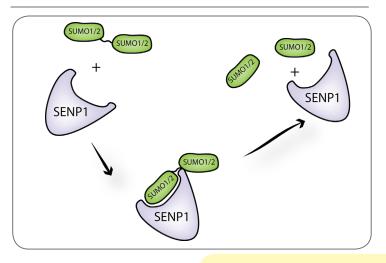
# His<sub>6</sub>-SENP1

Cat. No. SSB-DE0026 Lot. No. 163060026



SUMO/Sentrin Specific Peptidase 1 (SENP1) is a member of the SENP family of proteases, which belong to the group of cysteinetype peptidases that either catalyze the mature form of full-length Small Ubiquitinrelated MOdifiers (SUMOs), or the deconjugation of SUMOs from SUMOylated proteins, specifically SUMO2/3 chains by removing the distal SUMO1. SENP1 is expressed in many organs and is localized in the nucleus as well as the cytoplasm. SENP1 is thought to play a role in the development, progression, and metastasis of prostate cancer and has been shown to regulate erythropoietin production during hypoxia by regulating the stability of HIF1a. Furthermore, SENP1 deconjugates SUMO1 from HIPK2, from HDAC1, and BHLHE40/DEC1, which decreases its transcriptional repression activity. SENP1 has been shown to desumoylate CCAR2, which subsequently decreases the interaction with SIRT1.

Purified recombinant human Sentrin Specific Protease 1 (SENP1, catalytic domain) is a SUMO-specific enzyme that catalyzes two essential functions. Processing the full-length versions of SUMO1, SUMO2, and SUMO3 into its mature forms and the deconjugation of SUMOylated proteins.





#### **Product Information**

Quantity: 50µg Molecular Weight: 31.5 kDa

Concentration: 25 µM, 0.78mg/mL

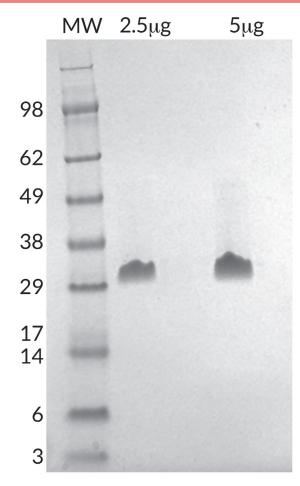
**Purity:** >95% by SDS-PAGE

Storage Buffer: 50 mM HEPES pH 7.5, 100 mM

NaCl, 1 mM TCEP

Storage: -80C, Avoid multiple freeze / thaw

### Quality Control and Performance Data



**His<sub>δ</sub>-SENP1 SDS-PAGE.** From left to right, increasing amounts of His<sub>δ</sub>-SENP1 loaded onto a 4-20% SDS-PAGE gel, stained with coomassie brillant blue. Purity is > 95%.

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## His,-SENP1

Cat. No. SSB-DE0026 Lot. No. 163060026



### References

- 1) Bailey, D. and P. O'Hare. "Characterization Of The Localization And Proteolytic Activity Of The SUMO-Specific Protease, SENP1". Journal of Biological Chemistry 279.1 (2003): 692-703. Web.
- 2) Kim, Young Ho et al. "Desumoylation Of Homeodomain-Interacting Protein Kinase 2 (HIPK2) Through The Cytoplasmic-Nuclear Shuttling Of The SUMO-Specific Protease SENP1". FEBS Letters 579.27 (2005): 6272-6278. Web. 8 Mar. 2017.
- 3) Scherer, Steven E. et al. "The Finished DNA Sequence Of Human Chromosome 12". Nature 440.7082 (2006): 346-351. Web. 8 Mar. 2017.
- 4) Sung, Ki Sa et al. "Differential Interactions Of The Homeodomain-Interacting Protein Kinase 2 (HIPK2) By Phosphorylation-Dependent Sumoylation". FEBS Letters 579.14 (2005): 3001-3008. Web. 8 Mar. 2017.

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