
MATERIAL DATA SHEET

His₆-SENP1 Catalytic Domain, *human recombinant*
Cat. # E-700

The covalent modification of proteins by SUMO is reversible and is mediated by SENP enzymes. SENPs cleave residues from the C-terminus of SUMO precursor proteins to generate the mature and active form which contains the conserved C-terminal di-glycine. These enzymes also reverse the process of SUMOylation by removing poly-SUMO conjugates from substrate proteins. SENP1 is active against SUMO-1, SUMO-2 and SUMO-3 *in vitro* but not ubiquitin or NEDD8. N-terminally tagged SENP1 contains the catalytic domain consisting of residues 415-643. Accession # NP_055369.

Product Information

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| Quantity: | 50 µg |
| Stock: | X mg/ml (X mM) in 50 mM Hepes pH 8.0, 100 mM NaCl, 10% glycerol, 5 mM DTT. Concentration will vary with specific Lot #. |
| MW: | 29.8 kDa |
| Purity: | > 95% by SDS-PAGE |

Use & Storage

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| Use: | Typical enzyme concentration to support hydrolysis of substrates <i>in vitro</i> is 50-500 nM depending on conditions. Pre-incubation (15 min) with 10 mM DTT is recommended to achieve maximum activity. |
| Storage: | Store at -80°C. Avoid multiple freeze/thaw cycles. |

Literature

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| References: | Bailey D and O'Hare P. (2004) <i>J.Biol.Chem.</i> 279 : 692-703 Chen J., <i>et al.</i> (2004) <i>Mol. Cell. Biol.</i> 24 :6021-6028 Chen J., <i>et al.</i> (2005) <i>J.Biol.Chem.</i> 280 : 14492-14498 Gong L. and Yeh. E.T.H. (1999) <i>J.Biol.Chem.</i> 274 :212036-12042 Kim Y.H., <i>et al.</i> (2005) <i>FEBS Lett.</i> 579 : 6272-6278 Xu K., <i>et al.</i> (2005) <i>Biochem. J.</i> 386 : 325-330 Yamaguchi T., <i>et al.</i> (2005) <i>Mol. Cell. Biol.</i> 12 :5171-5182 |
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