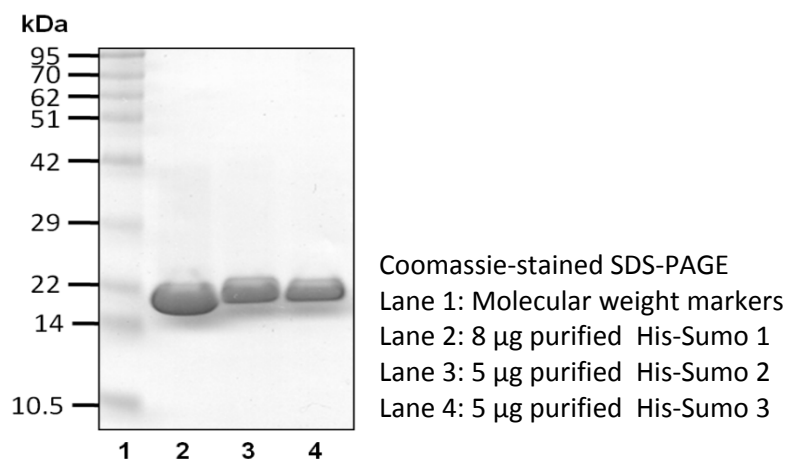


## 6xHis-Sumo 3

Cat. # E3320

<b>Also Known as:</b>	SMT3A; Smt3B; SMT3H1; SUMO-3
<b>NCBI Reference:</b>	NM_006936
<b>MW (no tag):</b>	11.6 kDa
<b>Species:</b>	Human
<b>Source:</b>	Bacterial recombinant
<b>Tag:</b>	6xHis
<b>Stock Buffer:</b>	20 mM Tris, 150 mM NaCl, 2 mM $\beta$ ME, 10% Glycerol
<b>Concentration:</b>	See tube label
<b>Quality Assurance:</b>	~95% by SDS-PAGE

### Image



### Description:

SUMO (small Ub-related modifier) is a Ub-like protein. Three types of SUMO are most commonly studied, SUMO 1, SUMO 2, and SUMO 3. SUMO 2 and SUMO 3 are almost identical isoforms and thus share many functions. Like Ub, SUMO can be conjugated to its target proteins as a polymeric chain. However, SUMO 1 forms chains inefficiently as compared to SUMO 2 and SUMO 3. SUMO is conjugated to target proteins by the E1 (SAE1/SAE2), E2 (Ube2I or Ubc9), E3 (RanBP2/Nup358, amongst others). Protein sumoylation is involved in many cellular processes including gene transcription.

### Storage:

Store at  $-80^{\circ}\text{C}$ ; avoid multiple freeze-thaw cycles

### Note:

N/A

### Literature:

1. Boddy MN, *et al.* (1996) *Oncogene* 13, 971 – 982.
2. Bayer P, *et al.* (1998) *J Mol Biol* 280, 275 – 286.
3. Melchior F, (2000) *Annu Rev Cell Dev Biol* 16, 591 – 626.
4. Praefcke GJK, *et al.* (2012) *Trends Biochem Sci* 37(1), 23 – 31.
5. Werner A, *et al.* (2012) *Mol Cell* 46(3), 287 – 298.

