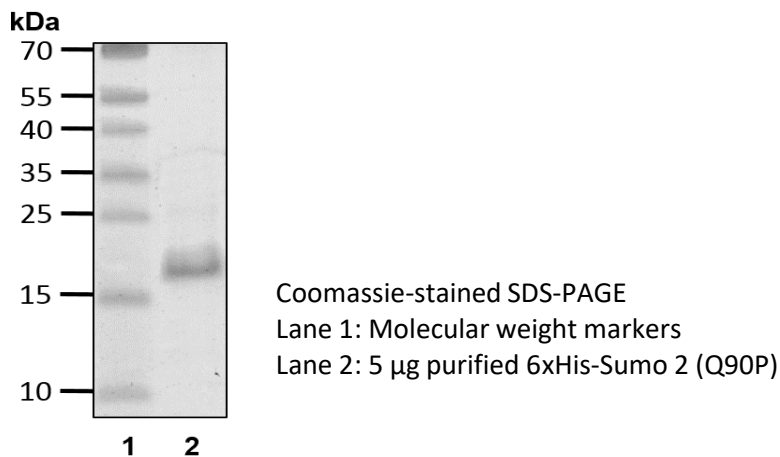


6xHis-Sumo 2 (Q90P)

Cat. # E3250

Also Known as: HSMT3; SMT3B; SUMO3; Smt3A; SMT3H2; MGC117191
NCBI Reference: NM_006937
MW (no tag): 10.9 kDa
Species: Human
Source: Bacterial recombinant
Tag: 6xHis
Stock Buffer: 20 mM Tris, pH7.6 at 4 °C, 150 mM NaCl, 2 mM βME, 10% Glycerol
Concentration: See tube label
Quality Assurance: ~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.

The SUMO2(Q90P) mutant can still form polySUMO2 chains, but these chains are often resistant to desumolvalation.

Storage:

Store at -80°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.

