

## Recombinant Human SUMO2 Protein (His Tag)

Catalog No. PKSH033067

### Description

<b>Synonyms</b>	Small Ubiquitin-Related Modifier 2; SUMO-2; HSMT3; SMT3 homolog 2; SUMO-3; Sentrin-2; Ubiquitin-Like Protein SMT3A; Smt3A; SUMO2; SMT3A; SMT3H2
<b>Species</b>	Human
<b>Expression_host</b>	E.coli
<b>Sequence</b>	Met1-Gly93
<b>Accession</b>	AAH08450.1
<b>Mol_Mass</b>	13 kDa
<b>AP_Mol_Mass</b>	17 kDa
<b>Tag</b>	N-6His

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Background

Small Ubiquitin-Related Modifier 2 (SUMO2) is an Ubiquitin-like protein that belongs to the ubiquitin family with SUMO subfamily. It is a family of small, related proteins that can be enzymatically attached to a target protein by a post-translational modification process termed sumoylation. SUMO2 can be covalently attached to proteins as a monomer or as a lysine-linked polymer. Covalent attachment via an isopeptide bond to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by an E3 ligase such as PIAS1-4, RANBP2 or CBX4. This post-translational modification on lysine residues of proteins plays a crucial role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Polymeric SUMO2 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins.

## SDS-PAGE

