



Recombinant Human SUMO2 (N-6His)

Catalog #	EPT277
Expression Host	E.coli
DESCRIPTION	Recombinant Human Small Ubiquitin-Related Modifier 2 is produced by our E.coli expression system and the target gene encoding Met1-Gly93 is expressed with a 6His tag at the N-terminus.
Accession	AAH08450.1
Synonyms	Small Ubiquitin-Related Modifier 2; SUMO-2; HSMT3; SMT3 homolog 2; SUMO-3; Sentrin-2; Ubiquitin-Like Protein SMT3A; Smt3A; SUMO2; SMT3A; SMT3H2
Mol Mass	13 KDa
AP Mol Mass	17 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.





RECONSTITUTION

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 μ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

STORAGE

Lyophilized protein should be stored at $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

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

