



Recombinant Protein Technical Manual

Recombinant Human SUMO2 Protein (His Tag)

RPES5166

Product Data:

Product SKU: RPES5166

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P61956

Protein Information:

Molecular Mass: 13 kDa

AP Molecular Mass: 17 kDa

Tag: N-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Small Ubiquitin-Related Modifier 2; SUMO-2; HSMT3; SMT3 homolog 2; SUMO-3; Sentrin-2; Ubiquitin-Like Protein SMT3A; Smt3A; SUMO2; SMT3A; SMT3H2

Immunogen Information:

Sequence: Met 1-Gly93

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.