RP02176

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Recombinant Human SUMO-1 Protein

Catalog No.: RP02176 Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
<I>E. coli</I>	7341	P63165

Tags
N-His

Synonyms
DAP1;GMP1;OFC10;PIC1;SENP2;SMT3;SMT3C;SMT3H3;UBL1;SUMO1;SUMO-1; DAP1; GMP1; OFC10; PIC1; SENP2; SMT3; SMT3C; SMT3H3; UBL1; small ubiquitin-like modifier 1

Product Information

Source	Purification
<I>E. coli</I>	> 95% by SDS-PAGE.

Endotoxin
< 1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.2 μm filtered solution of 50mM Tris-HCl, 100mM NaCl, 1mM DTT, pH 8.5 .Contact us for customized product form or formulation.

Reconstitution
Centrifuge the tube before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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Background

Small Ubiquitin-Related Modifier 1 (SUMO1) 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. SUMO1 functions in a manner similar to ubiquitin in that it is bound to target proteins as part of a post-translational modification system. 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. SUMO1 is involved in a variety of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. SUMO1 is not active until the last four amino acids of the carboxy-terminus are cleaved off. Polymeric SUMO1 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins and may also regulate a network of genes involved in palate development.

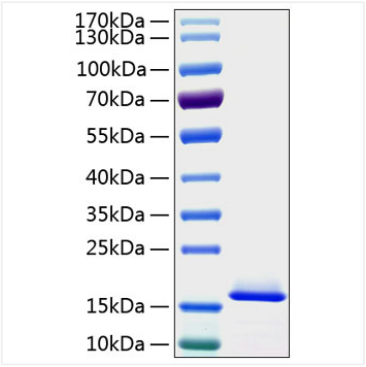
Basic Information

Description
Recombinant Human SUMO-1 Protein is produced by E.coli expression system. The target protein is expressed with sequence (Met1-Val101) of human SUMO1 (Accession #AAH66306) fused with a 6xHis tag at the N-terminus.

Bio-Activity

Storage
Store at -20℃.Store the lyophilized protein at -20℃ to -80 ℃ up to 1 year from the date of receipt.
After reconstitution, the protein solution is stable at -20℃ for 3 months, at 2-8℃ for up to 1 week.
Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human SUMO-1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 17-19kDa.