# **Recombinant Human SUMO-1 Protein**

ABclonal

www.abclonal.com

Catalog No.: RP02176 Recombinant

# **Sequence Information**

Species Gene ID Swiss Prot Human 7341 P63165

### **Tags**

N-His

### **Synonyms**

DAP1;GMP1;OFC10;PIC1;SENP2;SMT3;SM T3C;SMT3H3;UBL1;SUMO1;SUMO-1; DAP1; GMP1; OFC10; PIC1; SENP2; SMT3; SMT3C; SMT3H3; UBL1; small ubiquitinlike modifier 1

### **Product Information**

### Source Purification

E. coli ≥ 95 % as determined by SDS-

PAGE.

### Calculated MW Observed MW

13.7 kDa 17-19 kDa

# **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**

6		400-999-6126
$\bowtie$	Ī	cn.market@abclonal.com.cn

# **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**

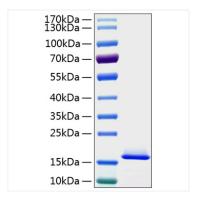
#### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

# **Validation Data**



Recombinant Human SUMO-1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.