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## Datasheet for ABIN7319262 **SUMO1 Protein (His tag)**

### Overview

Quantity:	50 µg
Target:	SUMO1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SUMO1 protein is labelled with His tag.

### Product Details

Purpose:	Recombinant Human SUMO1 Protein (His Tag)
Sequence:	Met 1-Val101
Characteristics:	Recombinant Human Small Ubiquitin-Related Modifier 1 is produced by our E.coli expression system and the target gene encoding Met1-Val101 is expressed with a 6His tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

### Target Details

Target:	SUMO1
Alternative Name:	SUMO1 ( <a href="#">SUMO1 Products</a> )
Background:	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

## Target Details

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.

Synonym: Small Ubiquitin-Related Modifier 1, SUMO-1, GAP-Modifying Protein 1, GMP1, SMT3 Homolog 3, Sentrin, Ubiquitin-Homology Domain Protein PIC1, Ubiquitin-Like Protein SMT3C, Smt3C, Ubiquitin-Like Protein, UBL1, SUMO1, SMT3C, SMT3H3, UBL1, DAP1, OFC10, SENP2, SMT3

Molecular Weight: 13.7 kDa

UniProt: [P63165](#)

Pathways: [M Phase](#), [Positive Regulation of Endopeptidase Activity](#), [Protein targeting to Nucleus](#), [Ubiquitin Proteasome Pathway](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

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

Buffer: Lyophilized from a 0.2 µm filtered solution of 50 mM TrisHCl, 100 mM NaCl, 1 mM DTT, pH 8.5 .

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: 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.