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SUMO1, human recombinant protein

Small ubiquitin-related modifier 1, SUMO-1, Sentrin, Ubiquitin-like protein SMT3C, SMT3 homolog 3, U

Catalog # PBV10504r

Specification

SUMO1, human recombinant protein - Product info

Primary Accession	P63165
Calculated MW	**11.1 kDa KDa**

SUMO1, human recombinant protein - Additional Info

Gene ID	**7341**
Gene Symbol	**SUMO1**

Other Names
Small ubiquitin-related modifier 1, SUMO-1, Sentrin, Ubiquitin-like protein SMT3C, SMT3 homolog 3, Ubiquitin-homology domain protein PIC1, Ubiquitin-like protein UBL1, GAP-modifying protein 1, GMP1, SUMO1, SMT3C, SMT3H3, UBL1, PIC1, SMT3, DAP-1, OFC10, SENP2.

Gene Source	**Human**
Source	**E. coli**
Assay&Purity	**SDS-PAGE; ≥90%**
Assay2&Purity2	**HPLC;**
Recombinant	**Yes**
Results	**10-50 µM**

Format
Liquid

Storage
-80°C; In 50 mM HEPES, pH 8.0, plus 150 mM NaCl, 1 mM DTT.

SUMO1, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SUMO1, human recombinant protein - Images

SUMO1, human recombinant protein - Background

SUMO modification has been implicated in functions such as nuclear transport, chromosome

segregation and transcriptional regulation. SUMO1 functions in a manner similar to ubiquitin in that it is bound to target proteins as part of a post-translational modification system. Still, unlike ubiquitin which targets proteins for degradation, SUMO1 is involved in a variety of Cellular processes, for example 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. The active recombinant SUMO-1 protein is derived from the precursor pro-SUMO-1 (Accession # NM_003352). Human SUMO-1 shares 46% and 47% identity with SUMO-2 and SUMO-3 respectively. SUMOylation can occur without the requirement of a specific E3 ligase activity, where SUMO is transferred directly from UbcH9 to specific substrates. SUMOylated substrates are primarily localized to the nucleus (RanGAP-1, RANBP2, PML, p53, Sp100, HIPK2) but there are also cytosolic substrates (IκBα, GLUT1, GLUT4).

SUMO1, human recombinant protein - References

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Boddy M.N.,et al.Oncogene 13:971-982(1996).
Shen Z.,et al.Genomics 36:271-279(1996).
Mahajan R.,et al.Cell 88:97-107(1997).
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