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**Recombinant Human Small Ubiquitin-Related Modifier 1 Protein****Cat.NO.: TP05338**

3th Edition

**Synonyms:**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

**Description:**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.

**Form:**PBS

**Molecular Weight:**13.7 kDa

**Sequences:**Met 1-Val101

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.