Recombinant Protein Technical Manual

Recombinant Human SUMO1 Protein (His Tag)(Active)

RPES4527

Product Data:

Product SKU: RPES4527

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: AAH66306.1

Protein Information:

Molecular Mass: 12.4 kDa

AP Molecular Mass:

Tag: N-His

Bio-activity: Measured by its ability to be proteolytically processed by SENP1. >50% of 1 µg Recombinant Human (rh) SUMO1 is cleaved by < 10 ng of recombinant human SENP.

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.5

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

Application:

Synonyms: Small Ubiquitin-Related Modifier 1; SUMO; 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

Immunogen Information:

Sequence: Ser 2-Val 101

Background:

Small ubiquitin-like modifier protein (SUMO) modification is a highly dynamic process, catalyzed by SUMO-specific activating (E1), conjugating (E2) and ligating (E3) enzymes, and reversed by a family of SUMO-specific proteases (SENPs). Small ubiquitin-like modifier 1 (SUMO1) is a member of the superfamily of ubiquitin-like proteins. Despite its structural similarity with ubiquitin, SUMO1 does not seem to play any role in protein degradation. SUMO1 plays an important role in modulation of NOX activity required for ROS generation. SUMO1 haploinsufficiency results in cleft lip and palate in animal models. SUMO1 gene variation in human non-syndromic cleft lip with or without cleft palate (NSCLP) development. SUMO may be useful as a novel target for therapy in oral squamous cell carcinoma (SCC) as well as a clinical indicator for tumor recurrence together with Mdm2.