Datasheet for ABIN7317307

SUMO1 Protein (His tag)

Go to Product page

Overview

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

Product Details

Purpose:	Recombinant Human SUMO1 Protein (His Tag)(Active)
Sequence:	Ser 2-Val 101
Characteristics:	A DNA sequence encoding the human SUMO1 (AAH66306.1) (Ser 2-Val 101) was expressed, with a polyhistide tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	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.

Target Details

Target:	SUMO1
Alternative Name:	SUMO1 (SUMO1 Products)

Target Details

Background:	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-1 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. 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:	12.4 kDa
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 sterile 20 mM Tris, 500 mM NaCl, pH 7.5
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.