



Rabbit Anti-SUMO1 monoclonal antibody, clone TK31-14 (CABT-L626)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	SUMO-1
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	TK31-14
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC, IP, FC, ChIP
Molecular Weight	12 kDa
Cellular Localization	Nucleus membrane, Cytoplasm, Nucleus, Cell membrane.
Positive Control	A549, MCF-7, Hela, mouse thyroid tissue, human tonsil tissue, mouse placenta tissue, human thyroid tissue, human breast carcinoma tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

Preservative	0.05% Sodium Azide
Storage	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction	The small ubiquitin-related modifier (SUMO) proteins, which include SUMO-1, SUMO-2 and SUMO-3, belong to the ubiquitin-like protein family. Like ubiquitin, the SUMO proteins are synthesized as precursor proteins that undergo processing before conjugation to target proteins. Also, both utilize the E1, E2, and E3 cascade enzymes for conjugation. However, SUMO and ubiquitin differ with respect to targeting. Ubiquitination predominantly targets proteins for degradation, whereas sumoylation targets proteins to a variety of cellular processing, including nuclear transport, transcriptional regulation, apoptosis and protein stability. The unconjugated SUMO-1, SUMO-2 and SUMO-3 proteins localize to the nuclear membrane, nuclear bodies and cytoplasm, respectively. SUMO-1 utilizes Ubc9 for conjugation to several target proteins, which include IκBα, MDM2, p53, PML and Ran GAP1. SUMO-2 and SUMO-3 contribute to a greater percentage of protein modification than does SUMO-1, and unlike SUMO-1, they can form polymeric chains. In addition, SUMO-3 regulates b-Amyloid generation and may be critical in the onset or progression of Alzheimer's disease.
Keywords	DAP1;GAP modifying protein 1;GAP-modifying protein 1;GMP 1;GMP1;OFC10;PIC 1;PIC1;SEN2;Sentrin 1;Sentrin;Small ubiquitin related modifier 1;Small ubiquitin-like modifier 1;Small ubiquitin-related modifier 1;SMT3;SMT3 homolog 3;SMT3 suppressor of mif two 3 homolog 1;SMT3, yeast, homolog 3;Smt3C;SMT3H3;SUMO-1;SUMO1;SUMO1_HUMAN;Ubiquitin homology domain protein PIC1;Ubiquitin Like 1;Ubiquitin like protein SMT3C;Ubiquitin like protein UBL1;Ubiquitin-homology domain protein PIC1;Ubiquitin-like protein SMT3C;Ubiquitin-like protein UBL1;UBL 1;UBL1 antibody