

## SUMO-1 Rabbit mAb

Catalog No: #48765



Package Size: #48765-1 50ul #48765-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

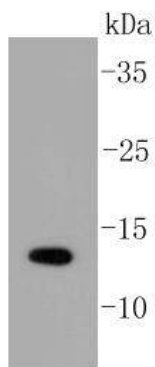
## Description

Product Name	SUMO-1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SJ20-03
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC, ChIP
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	DAP1 antibody GAP modifying protein 1 antibody GAP-modifying protein 1 antibody GMP 1 antibody GMP1 antibody OFC10 antibody PIC 1 antibody PIC1 antibody SENP2 antibody Sentrin 1 antibody Sentrin antibody Small ubiquitin related modifier 1 antibody Small ubiquitin-like modifier 1 antibody Small ubiquitin-related modifier 1 antibody SMT3 antibody SMT3 homolog 3 antibody SMT3 suppressor of mif two 3 homolog 1 antibody SMT3, yeast, homolog 3 antibody Smt3C antibody SMT3H3 antibody SUMO-1 antibody SUMO1 antibody SUMO1_HUMAN antibody Ubiquitin homology domain protein PIC1 antibody Ubiquitin Like 1 antibody Ubiquitin like protein SMT3C antibody Ubiquitin like protein UBL1 antibody Ubiquitin-homology domain protein PIC1 antibody Ubiquitin-like protein SMT3C antibody Ubiquitin-like protein UBL1 antibody UBL 1 antibody UBL1 antibody
Accession No.	Swiss-Prot#:P63165
Uniprot	P63165
GeneID	7341;
Calculated MW	12 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

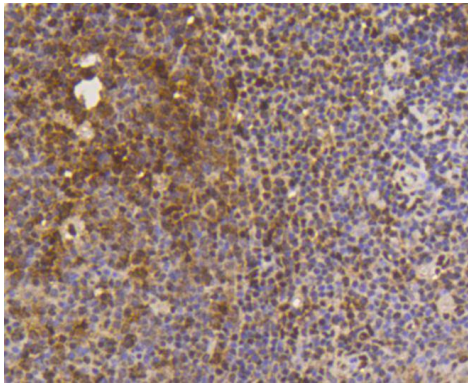
## Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

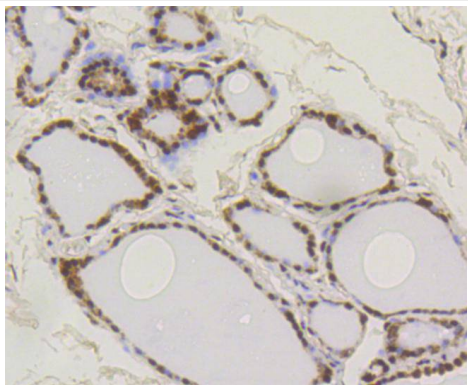
## Images



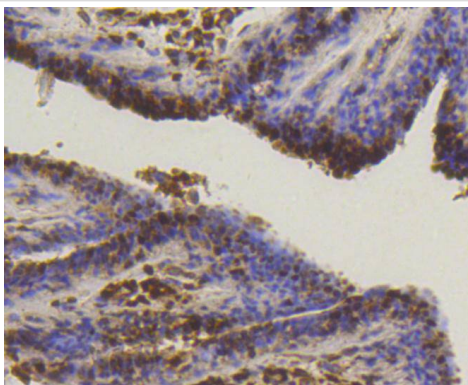
Western blot analysis of SUMO-1 on Hela cell lysates using anti-SUMO-1 antibody at 1/1,000 dilution.



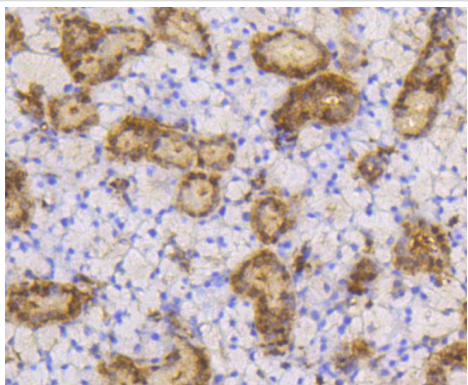
Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-SUMO-1 antibody. Counter stained with hematoxylin.



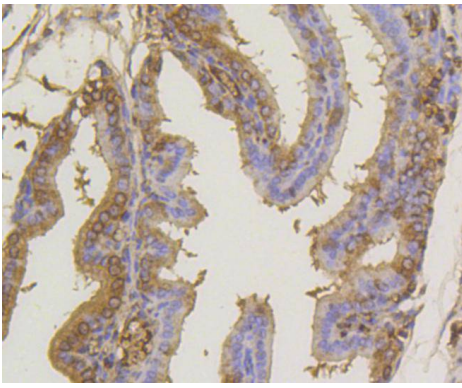
Immunohistochemical analysis of paraffin-embedded human thyroid tissue using anti-SUMO-1 antibody. Counter stained with hematoxylin.



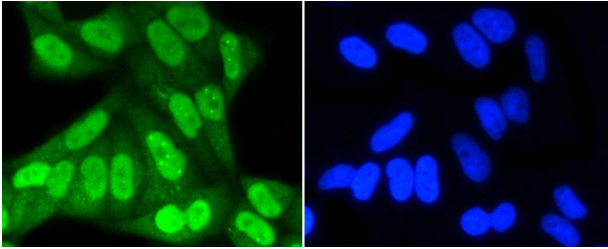
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-SUMO-1 antibody. Counter stained with hematoxylin.



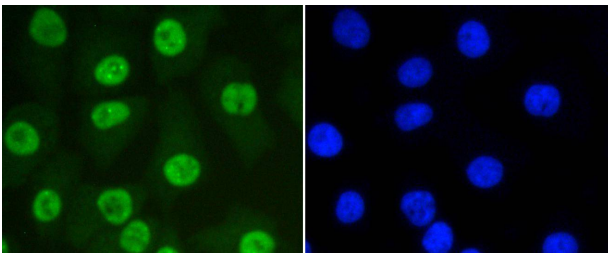
Immunohistochemical analysis of paraffin-embedded mouse thyroid tissue using anti-SUMO-1 antibody. Counter stained with hematoxylin.



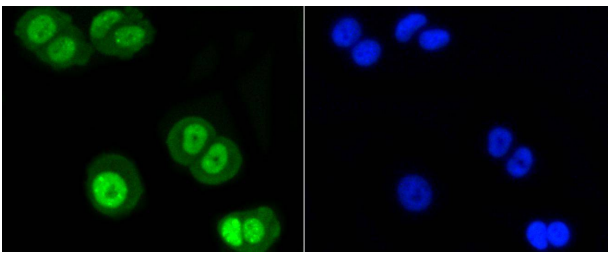
Immunohistochemical analysis of paraffin-embedded mouse placenta tissue using anti-SUMO-1 antibody. Counter stained with hematoxylin.



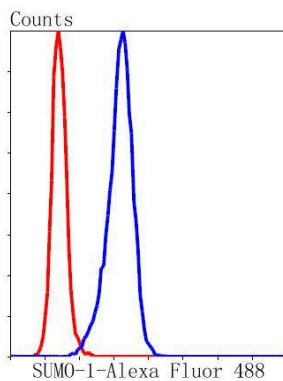
ICC staining SUMO-1 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining SUMO-1 in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining SUMO-1 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of HeLa cells with SUMO-1 antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

## Background

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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 I $\kappa$ B $\alpha$ , 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 Alzheimers disease.

## References

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Note: This product is for in vitro research use only