Product Datasheet

SUMO1 Antibody

Catalog No: #32614

Package Size: #32614-1 50ul #32614-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

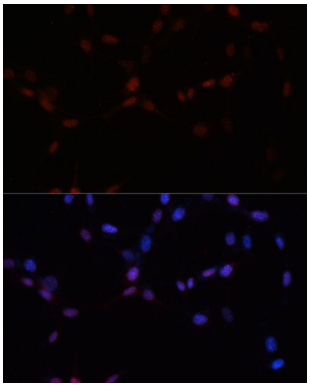
Description

Product Name	SUMO1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total SUMO1 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human SUMO1.
Target Name	SUMO1
Other Names	DAP-1; GMP1; OFC10; PIC1; SENP2
Accession No.	Swiss-Prot:P63165NCBI Gene ID:7341
Uniprot	P63165
GeneID	7341;
SDS-PAGE MW	12KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

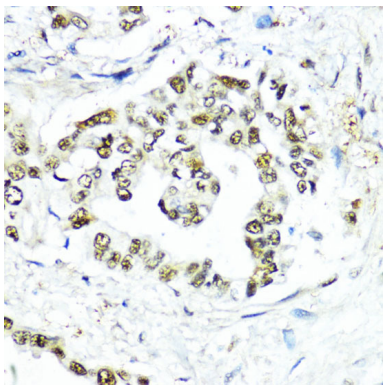
Application Details

WB□1:500 - 1:2000IHC□1:50 - 1:100IF□1:50 - 1:200IP□1:50 - 1:200

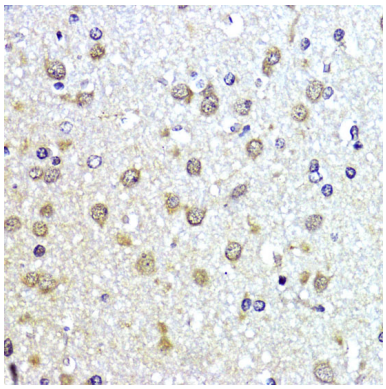
Images



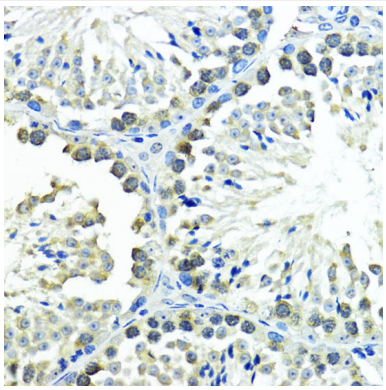
Immunofluorescence analysis of NIH-3T3 cells using SUMO1 at dilution of 1:100. Blue: DAPI for nuclear staining.



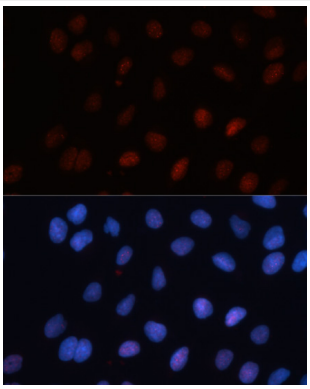
Immunohistochemistry of paraffin-embedded human lung cancer using SUMO1 at dilution of 1:200 (40x lens).



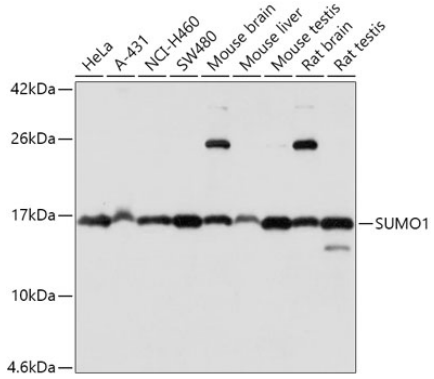
Immunohistochemistry of paraffin-embedded rat brain using SUMO1 at dilution of 1:200 (40x lens).



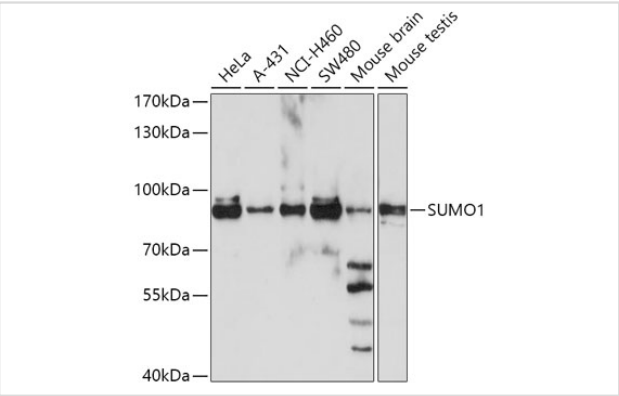
Immunohistochemistry of paraffin-embedded mouse testis using SUMO1 at dilution of 1:200 (40x lens).



Immunofluorescence analysis of U-2 OS cells using SUMO1 at dilution of 1:100. Blue: DAPI for nuclear staining.



Western blot analysis of extracts of various cell lines, using SUMO1 at 1:1000 dilution.



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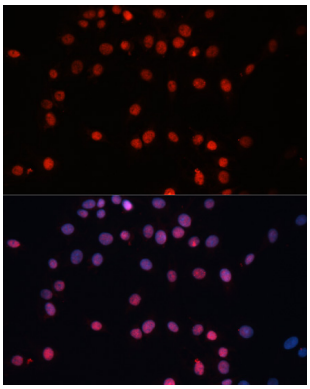

Immunofluorescence analysis of C6 cells using SUMO1 at dilution of 1:100. Blue: DAPI for nuclear staining.

Background

Small ubiquitin-related modifier 1, 2 and 3 (SUMO-1, -2 and -3) are members of the ubiquitin-like protein family (1). The covalent attachment of the SUMO-1, -2 or -3 (SUMOylation) to target proteins is analogous to ubiquitination. This post-translational modification is a reversible, multi-step process that is initiated by cleaving a precursor protein to a mature protein. Mature SUMO-1, -2 or -3 is then linked to the activating enzyme E1, conjugated to E2 and in conjunction with E3, SUMO-1, -2 or -3 is ligated to the target protein (2). Ubiquitin and the individual SUMO family members are all targeted to different proteins with diverse biological functions. Ubiquitin predominantly regulates degradation of its target (1). In contrast, SUMO-1 is conjugated to RanGAP, PML, p53 and IκB-α to regulate nuclear trafficking, formation of subnuclear structures, regulation of transcriptional activity and protein stability (3-7). SUMO-2/-3 forms poly-(SUMO) chains, is conjugated to topoisomerase II and APP, regulates chromosomal segregation and cellular responses to environmental stress, and plays a role in the progression of Alzheimer disease (8-11).

Note: This product is for in vitro research use only