

Datasheet for ABIN2452138
anti-SUMO1 antibody (full length)

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Overview

Quantity:	100 µg
Target:	SUMO1
Binding Specificity:	full length
Reactivity:	Human
Host:	Rat
Clonality:	Monoclonal
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Recombinant GST-fused human SUMO1 (full length)
Clone:	4D12
Isotype:	IgG2a kappa
Specificity:	Specific to human, simian, mouse and rat SUMO1.
Cross-Reactivity (Details):	Not tested for other species
Purification:	The antibody was produced in serum-free medium and purified by proprietary chromatography procedures under mild conditions.
Sterility:	Sterile filtered

Target Details

Target:	SUMO1
Alternative Name:	SUMO1 (SUMO1 Products)
Background:	<p>SUMO (Small Ubiquitin-like Modifier) proteins are a family of small proteins that are covalently attached to and detached from other proteins in cells to modify their function. Unlike ubiquitination, which targets proteins for degradation, SUMO modification plays a critical role in a number of cellular functions including nucleocytoplasmic transport, gene expression, cell cycle and formation of subnuclear structures such as promyelocytic leukemia (PML) bodies. There are three confirmed SUMO isoforms in human, SUMO1, SUMO2 and SUMO3. SUMO2 /3 show a high degree of similarity to each other and are distinct from SUMO1. Individual SUMO family members are all targeted to different proteins with diverse biological functions. SUMO-1 is conjugated to RanGAP, PML, p53 and IκBα to regulate nuclear trafficking, formation of subnuclear structures, regulation of transcriptional activity and protein stability. SUMO1 is encoded as a 101 aa protein and first Met and C-terminal 4 aa are removed from the preprotein.</p>
UniProt:	P63165
Pathways:	M Phase , Positive Regulation of Endopeptidase Activity , Protein targeting to Nucleus , Ubiquitin Proteasome Pathway

Application Details

Application Notes:	<ol style="list-style-type: none">1. Western blotting: 1/1,0002. Immunofluorescence staining: 1/100 dilution3. Immunohistochemistry, Frozen section: 1/100 dilution4. ELISA (assay dependent) <p>Other applications have not been tested.</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS (x1), 50 % glycerol. Azide and carrier free.
Preservative:	Azide free
Storage:	-20 °C

Handling

Storage Comment: Upon arrival centrifuge briefly and store at -20 C.

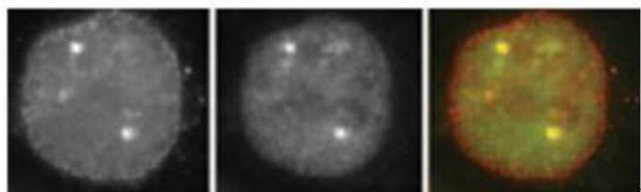
Publications

Product cited in: Freed: "HIV-1 gag proteins: diverse functions in the virus life cycle." in: **Virology**, Vol. 251, Issue 1, pp. 1-15, (1998) ([PubMed](#)).

Saito, Morimoto, Ohara, Takamizawa, Nakata, Shinagawa: "Overproduction, purification, and diagnostic use of the recombinant HIV-1 Gag proteins, the precursor protein p55 and the processed products p17, p24, and p15." in: **Microbiology and immunology**, Vol. 39, Issue 7, pp. 473-83, (1996) ([PubMed](#)).

Adachi, Gendelman, Koenig, Folks, Willey, Rabson, Martin: "Production of acquired immunodeficiency syndrome-associated retrovirus in human and nonhuman cells transfected with an infectious molecular clone." in: **Journal of virology**, Vol. 59, Issue 2, pp. 284-91, (1986) ([PubMed](#)).

Images



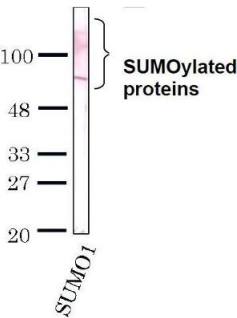
Immunofluorescence

Image 1.

Western Blotting

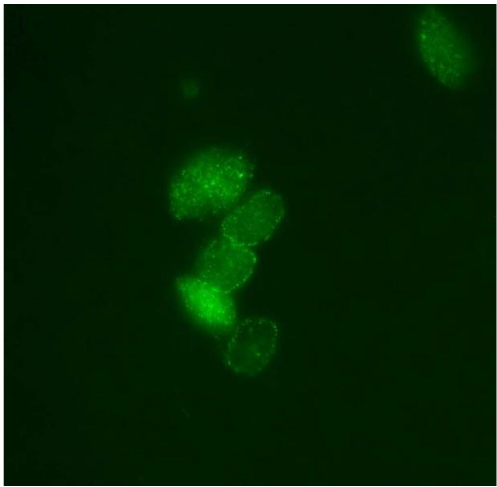
Image 2.

Fig.1. Detection of SUMO-1 by Western blotting with the antibody 4D12.
An 80 kDa single and other multiple bands were observed in HeLa total cell extract.
The 80 kDa band would be SUMO-RanGAP.
Anti-SUMO-1 antibody 4D12 was used at 1 µg/ml.



Immunofluorescence

Image 3.



Please check the [product details page](#) for more images. Overall 4 images are available for ABIN2452138.