

Datasheet for ABIN2452136

anti-SUMO1 antibody (full length) (FITC)**3** Images**4** Publications[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	SUMO1
Binding Specificity:	full length
Reactivity:	Human
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This SUMO1 antibody is conjugated to FITC
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Recombinant GST-fused human SUMO-1 (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 and conjugated with FITC.
Sterility:	Sterile filtered

Target Details

Target:	SUMO1
Alternative Name:	SUMO1 (SUMO1 Products)
Background:	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 SUMO-1. 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.
UniProt:	P63165
Pathways:	M Phase , Positive Regulation of Endopeptidase Activity , Protein targeting to Nucleus , Ubiquitin Proteasome Pathway

Application Details

Application Notes:	1. Immunofluorescence staining: 1/100 dilution 2. Immunohistochemistry,frozen section: 1/100 dilution
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

Publications

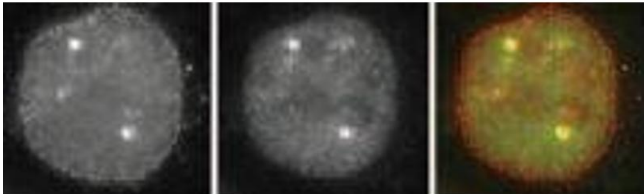
Product cited in:	Ulrich: "The fast-growing business of SUMO chains." in: Molecular cell , Vol. 32, Issue 3, pp. 301-
-------------------	--

5, (2008) ([PubMed](#)).

Saitoh, Uchimura, Tachibana, Sugahara, Saitoh, Nakao: "In situ SUMOylation analysis reveals a modulatory role of RanBP2 in the nuclear rim and PML bodies." in: **Experimental cell research**, Vol. 312, Issue 8, pp. 1418-30, (2006) ([PubMed](#)).

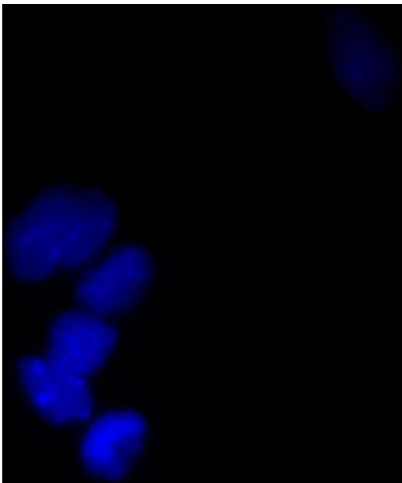
Cheng, Bawa, Lee, Gong, Yeh: "Role of desumoylation in the development of prostate cancer." in: **Neoplasia (New York, N.Y.)**, Vol. 8, Issue 8, pp. 667-76, (2006) ([PubMed](#)).

Uchimura, Ichimura, Uwada, Tachibana, Sugahara, Nakao, Saitoh: "Involvement of SUMO modification in MBD1- and MCAF1-mediated heterochromatin formation." in: **The Journal of biological chemistry**, Vol. 281, Issue 32, pp. 23180-90, (2006) ([PubMed](#)).



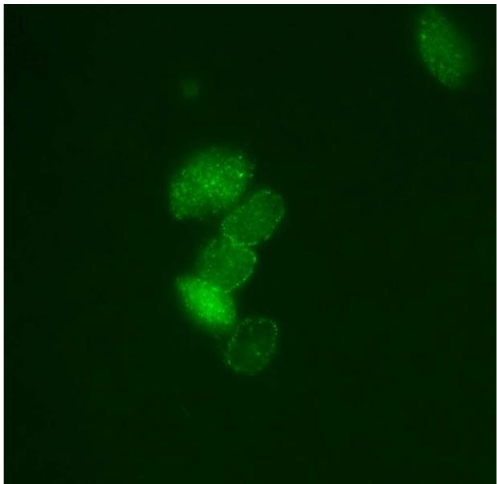
Immunofluorescence

Image 1.



Immunofluorescence

Image 2.



Immunofluorescence

Image 3.