

ARG54869 anti-SUMO (pan) antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes SUMO (pan)
Tested Reactivity	Hu, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SUMO (pan)
Species	Human
Immunogen	Recombinant protein encoding full length Human SUMO3.
Conjugation	Un-conjugated
Alternate Names	SMT3 homolog 1; SMT3A; SUMO-3; SUMO-2; Small ubiquitin-related modifier 3; SMT3H1; Ubiquitin-like protein SMT3A; Smt3B; Smt3A

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:10 - 1:50
	IHC-P	Assay-dependent
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	293	

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 499417 Rat](#)

[GeneID: 6612 Human](#)

[Swiss-port # P55854 Human](#)

[Swiss-port # Q5XIF4 Rat](#)

Gene Symbol

SUMO3

Gene Full Name

small ubiquitin-like modifier 3

Background

This gene encodes a member of the small ubiquitin-related modifier (SUMO) family of eukaryotic proteins. The encoded protein is covalently conjugated to other proteins via a post-translation modification known as sumoylation. Sumoylation may play a role in a wide variety of cellular processes, including nuclear transport, DNA replication and repair, mitosis, transcriptional regulation, and signal transduction. Alternatively spliced transcript variants encoding distinct proteins have been described. [provided by RefSeq, Feb 2014]

Function

Ubiquitin-like protein which can be covalently attached to target lysines either as a monomer or as a lysine-linked polymer. Does not seem to be involved in protein degradation and may function as an antagonist of ubiquitin in the degradation process. Plays a role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Covalent attachment to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by an E3 ligase such as PIAS1-4, RANBP2 or CBX4 (PubMed:11451954, PubMed:18538659, PubMed:21965678). Plays a role in the regulation of sumoylation status of SETX (PubMed:24105744). [UniProt]

Research Area

Cell Biology and Cellular Response antibody

Calculated Mw

12 kDa

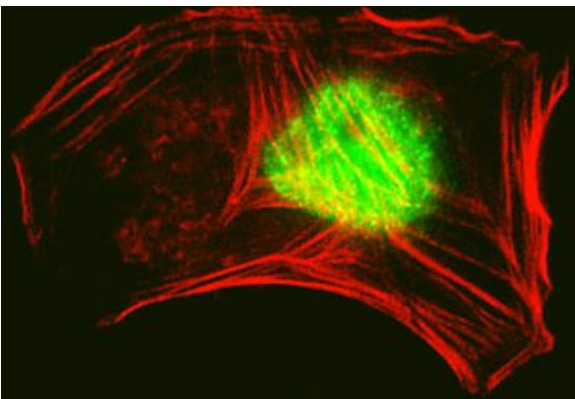
PTM

Polymeric chains can be formed through Lys-11 cross-linking.
Cleavage of precursor form by SENP1, SENP2 or SENP5 is necessary for function.

Cellular Localization

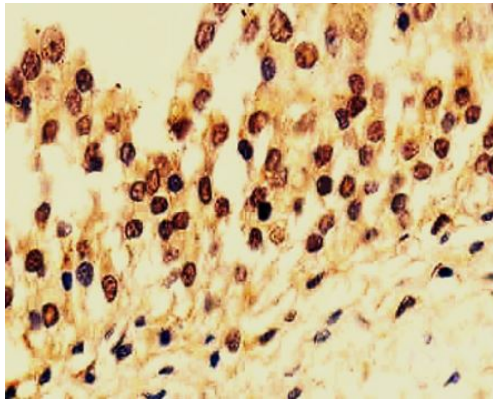
Cytoplasm. Nucleus. Nucleus, PML body

Images



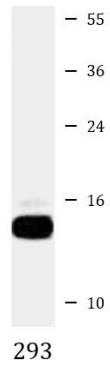
ARG54869 anti-SUMO (pan) antibody ICC/IF image

Immunofluorescence: HeLa cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then stained with ARG54869 anti-SUMO (pan) antibody (green) at 1:25 dilution, 1 h at 37°C. Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7 units/ml, 1 h at 37°C). DAPI (blue) for nuclear staining.



ARG54869 anti-SUMO (pan) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human bladder tissue stained with ARG54869 anti-SUMO (pan) antibody at 1:100 dilution.



ARG54869 anti-SUMO (pan) antibody WB image

Western blot: 35 µg of 293 cell lysate stained with ARG54869 anti-SUMO (pan) antibody.