

ARG40885 anti-SUMO1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes SUMO1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SUMO1
Species	Human
Immunogen	Synthetic peptide derived from Human SUMO1.
Conjugation	Un-conjugated
Alternate Names	OFC10; UBL1; SMT3C; Ubiquitin-like protein UBL1; Small ubiquitin-related modifier 1; PIC1; SMT3H3; SMT3; DAP1; Ubiquitin-like protein SMT3C; SENP2; Smt3C; GAP-modifying protein 1; Ubiquitin-homology domain protein PIC1; SUMO-1; SMT3 homolog 3; GMP1; Sentrin

Application Instructions

Application table	Application	Dilution
	FACS	1:50
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	13 kDa	

Properties

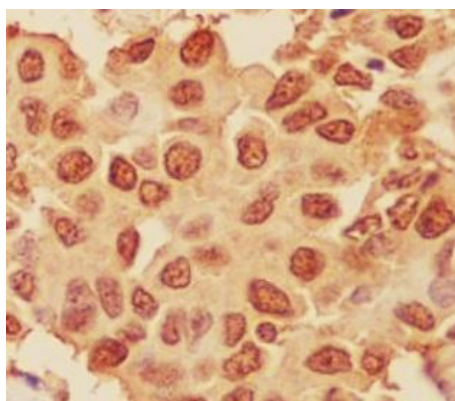
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol

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. 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

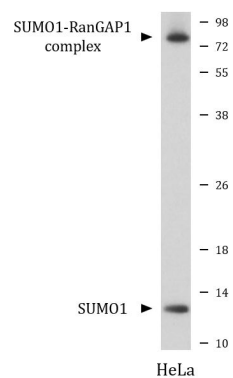
Gene Symbol	SUMO1
Gene Full Name	small ubiquitin-like modifier 1
Background	This gene encodes a protein that is a member of the SUMO (small ubiquitin-like modifier) protein family. It functions in a manner similar to ubiquitin in that it is bound to target proteins as part of a post-translational modification system. However, unlike ubiquitin which targets proteins for degradation, this protein is involved in a variety of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. It is not active until the last four amino acids of the carboxy-terminus have been cleaved off. Several pseudogenes have been reported for this gene. Alternate transcriptional splice variants encoding different isoforms have been characterized. [provided by RefSeq, Jul 2008]
Function	Ubiquitin-like protein that can be covalently attached to proteins as a monomer or a lysine-linked polymer. Covalent attachment via an isopeptide bond to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by E3 ligases such as PIAS1-4, RANBP2 or CBX4. This post-translational modification on lysine residues of proteins plays a crucial role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Involved for instance in targeting RANGAP1 to the nuclear pore complex protein RANBP2. Covalently attached to the voltage-gated potassium channel KCNB1; this modulates the gating characteristics of KCNB1. Polymeric SUMO1 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins. May also regulate a network of genes involved in palate development. [UniProt]
Calculated Mw	12 kDa
PTM	Cleavage of precursor form by SENP1 or SENP2 is necessary for function. Polymeric SUMO1 chains undergo polyubiquitination by RNF4. [UniProt]
Cellular Localization	Nucleus membrane. Nucleus speckle. Cytoplasm. Nucleus, PML body. Cell membrane. Nucleus. Note=Recruited by BCL11A into the nuclear body. In the presence of ZFX3, sequestered to nuclear body (NB)-like dots in the nucleus some of which overlap or closely associate with PML body. [UniProt]

Images



ARG40885 anti-SUMO1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma stained with ARG40885 anti-SUMO1 antibody.



ARG40885 anti-SUMO1 antibody WB image

Western blot: HeLa cell lysate stained with ARG40885 anti-SUMO1 antibody.