

Rabbit SUMO3 Polyclonal Antibody | anti-SUMO3 antibody

SUMO3 Antibody

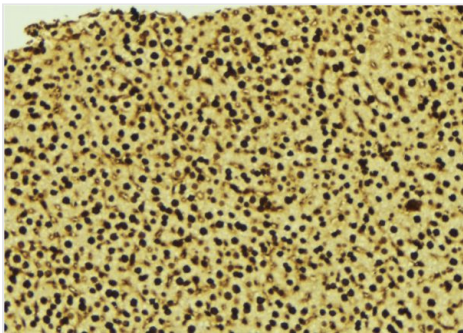
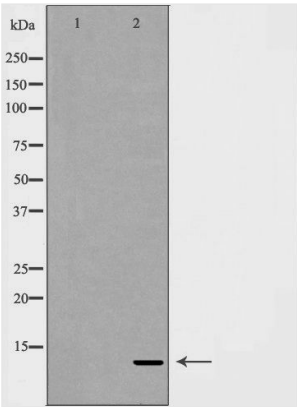
CATALOG # AAA326910	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

SUMO3; Polyclonal Antibody; SUMO3 Antibody; Small ubiquitin like modifier 3; Small ubiquitin related modifier 3; Small ubiquitin-related modifier 3; SMT3 homolog 1; SMT3 suppressor of mif two 3 homolog 1; SMT3 suppressor of mif two 3 homolog 3; SMT3; yeast; homolog 1; SMT3A; Smt3B; SMT3H1; SUMO-2; SUMO-3; sumo3; SUMO3_HUMAN; Ubiquitin like protein SMT3A; Ubiquitin-like protein SMT3B; anti-SUMO3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	SUMO3 antibody detects endogenous levels of total SUMO3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	141
Applicable Applications for anti-SUMO3 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide of human SUMO3
Subcellular Location	Cytoplasmic (SUMO3) and Nuclear (SUMO2)
Tissue Specificity	Expressed predominantly in liver.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326910 at 1/100 staining Mouse liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of extracts of MCF7, using SUMO3 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-SUMO3 antibody

Description: 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 IkappaB-alpha 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).

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).

Subunit Structure: Covalently attached to a number of proteins. Interacts with ARNTL/BMAL1 (By similarity). Interacts with USP25 (via ts SIM domain); the interaction sumoylates USP25 and inhibits its ubiquitin hydrolyzing activity. Interacts with SAE2 and UBE2I.

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

Similarity: Belongs to the ubiquitin family. SUMO subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	556695502
NCBI GeneID	6612
NCBI Accession #	NP_001273345.1
NCBI GenBank Nucleotide #	NM_001286416.1
UniProt Accession #	P55854; Q53HI9; Q6FGD4; Q9BWR4; B2R5X4; B4DUW4
Molecular Weight	Observed: 12 kDa Predicted: 12 kDa
NCBI Official Full Name	small ubiquitin-related modifier 3 isoform 2

NCBI Official Synonym Full Names	small ubiquitin-like modifier 3
NCBI Official Symbol	SUMO3
NCBI Official Synonym Symbols	SMT3A; Smt3B; SMT3H1; SUMO-3
NCBI Protein Information	small ubiquitin-related modifier 3
UniProt Protein Name	Small ubiquitin-related modifier 3
UniProt Gene Name	SUMO3
UniProt Synonym Gene Names	SMT3A1 PublicationManual assertion based on opinion iniRef.1; Smt3A1 PublicationManual assertion based on opinion iniRef.1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/sumo3-antibody-immunohistochemistry-western-blot-elisa/326910>