

Rabbit SUMO2 Polyclonal Antibody | anti-SUMO2 antibody

SUMO2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326773	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

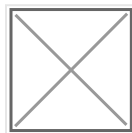
PRODUCT SYNONYMS

SUMO2; Polyclonal Antibody; SUMO2 Antibody; HSMT3; MGC117191; OTTHUMP00000115275; OTTHUMP00000115276; OTTHUMP00000115277; Sentrin 2; Small ubiquitin like modifier 2; Small ubiquitin related modifier 2; small ubiquitin-like modifier 3; small ubiquitin-related modifier 3; SMT3 homolog 1; SMT3 homolog 2; SMT3 suppressor of mif two 3 homolog 1; SMT3 suppressor of mif two 3 homolog 2 (*S. cerevisiae*); SMT3 suppressor of mif two 3 homolog 2; SMT3 suppressor of mif two 3 homolog 3 (*S. cerevisiae*); SMT3 suppressor of mif two 3 homolog 3; SMT3A; SMT3B; SMT3H1; SMT3H2; Sumo2; Sumo3; Ubiquitin like protein SMT3A; Ubiquitin like protein SMT3B; anti-SUMO2 antibody

PRODUCT SPECIFICATIONS

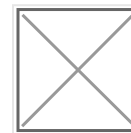
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	SUMO2 antibody detects endogenous levels of total SUMO2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	71
Applicable Applications for anti-SUMO2 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human SUMO2
Subcellular Location	Nucleus. Nuclear Bodies.
Tissue Specificity	Broadly expressed.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of Hela whole cell lysates, using SUMO2 Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326773 at 1/100 staining Human heart 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.

ADDITIONAL INFORMATION

Related Product Information for anti-SUMO2 antibody	Description: 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 two amino acids of the carboxy-terminus have been cleaved off. Numerous pseudogenes have been reported for this gene. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. Function: Ubiquitin-like protein that can be covalently attached to proteins as a monomer or as 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 an E3 ligase such as PIAS1-4, RANBP2, CBX4 or ZNF451 (PubMed:26524494). 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. Polymeric SUMO2 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins (PubMed:18408734, PubMed:18538659, PubMed:21965678, PubMed:9556629). Plays a role in the regulation of sumoylation status of SETX (PubMed:24105744). Subunit Structure: Interacts with SAE2 and UBE2I. Interacts with ZNF451. Identified in a complex with ZNF451 and UBE2I/UBC9, where one ZNF451 interacts with one UBE2I/UBC9 and two SUMO2 chains, one bound to the UBE2I/UBC9 active site and the other to another region of the same UBE2I/UBC9 molecule. Covalently attached to a number of proteins. Interacts with PELP1. Interacts with USP25; the interaction sumoylates USP25. Interacts with SIMC1, CASP8AP2, RNF111 AND SOBP (via SIM domains). Interacts with MTA1. Interacts with Epstein-barr virus BGLF4. Post-translational Modifications: Polymeric chains can be formed through Lys-11 cross-linking. Polymeric SUMO2 chains undergo 'Lys-6'-, 'Lys-11'-, 'Lys-48'-and 'Lys-63'-linked polyubiquitination by RNF4. Cleavage of precursor form by SENP1 or SENP2 is necessary for function. Monoubiquitinated N-terminally by UBE2W, which primes it for RNF4-dependent polyubiquitination by the UBE2V1-UBE2N heterodimer. Similarity: Belongs to the ubiquitin family. SUMO subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	54792071
NCBI GeneID	6613
NCBI Accession #	NP_001005849.1
NCBI GenBank Nucleotide #	NM_001005849.1
UniProt Accession #	P61956; P55855; Q32Q42; Q6IPZ6; Q96HK1; B2R4I2
Molecular Weight	Observed: 11 kDa Predicted: 11 kDa
NCBI Official Full Name	small ubiquitin-related modifier 2 isoform b
NCBI Official Synonym Full Names	small ubiquitin-like modifier 2
NCBI Official Symbol	SUMO2
NCBI Official Synonym Symbols	HSMT3; SMT3B; SUMO3; Smt3A; SMT3H2
NCBI Protein Information	small ubiquitin-related modifier 2
UniProt Protein Name	Small ubiquitin-related modifier 2
UniProt Gene Name	SUMO2
UniProt Synonym Gene Names	SMT3B1 PublicationManual assertion based on opinion iniRef.8; Smt3B1 PublicationManual assertion based on opinion iniRef.8

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.

