

Anti-SUMO2 antibody



Description Unconjugated Rabbit polyclonal to SUMO2

Model STJ190176

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, WB

Immunogen Synthesized peptide derived from human SUMO2 protein.

Immunogen Region 10-90aa

Gene ID <u>6613</u>

Gene Symbol SUMO2

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity SUMO2 Polyclonal Antibody detects endogenous levels of protein.

Tissue Specificity Broadly expressed.

Purification SUMO2 antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Small ubiquitin-related modifier 2 SUMO-2 HSMT3 SMT3 homolog 2

SUMO-3 Sentrin-2 Ubiquitin-like protein SMT3B Smt3B

Molecular Weight 10 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:11125OMIM:603042</u>

Alternative Names Small ubiquitin-related modifier 2 SUMO-2 HSMT3 SMT3 homolog 2

SUMO-3 Sentrin-2 Ubiquitin-like protein SMT3B Smt3B

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 . 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 . Plays a role in the regulation of sumoylation status of

SETX.

Cellular Localization Nucleus. Nucleus, PML body.

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.

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