

Cleaved-SUMO-2/3 (G93) Polyclonal Antibody

Catalog # AP63150

Product Information

Application	WB
Primary Accession	<u>P61956</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	10871

Additional Information

Gene ID	6613
Other Names	SUMO2; SMT3A; SMT3H2; Small ubiquitin-related modifier 2; SUMO-2; HSMT3; SMT3 homolog 2; SUMO-3; Sentrin-2; Ubiquitin-like protein SMT3A; Smt3A
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	SUMO2 (<u>HGNC:11125</u>)
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: <u>26524494</u>). 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: <u>18408734</u> , PubMed: <u>18538659</u> , PubMed: <u>21965678</u> , PubMed: <u>9556629</u>). Plays a role in the regulation of sumoylation status of SETX (PubMed: <u>24105744</u>).
Cellular Location	Nucleus. Nucleus, PML body.
Tissue Location	Broadly expressed

Background

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:<u>26524494</u>). 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:<u>18408734</u>, PubMed:<u>18538659</u>, PubMed:<u>21965678</u>, PubMed:<u>9556629</u>). Plays a role in the regulation of sumoylation status of SETX (PubMed:<u>24105744</u>).

Images



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