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Anti-SUMO2/3 Antibody

Catalog # AP59703

Product Information

Application	WB, IF/IC
Primary Accession	P61956
Reactivity	Human, Mouse, Rat, Zebrafish, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	10871

Additional Information

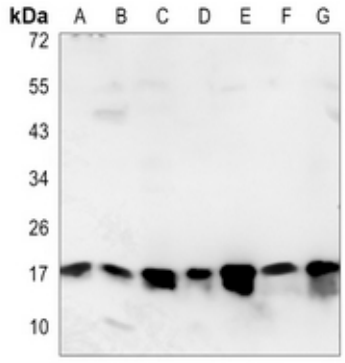
Gene ID	6613
Other Names	SMT3A; SMT3H2; Small ubiquitin-related modifier 2; SUMO-2; HSMT3; SMT3 homolog 2; SUMO-3; Sentrin-2; Ubiquitin-like protein SMT3A; Smt3A
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SUMO2/3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

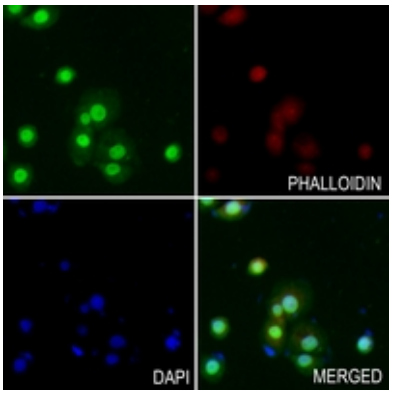
Name	SUMO2 (HGNC:11125)
Function	Ubiquitin-like protein that can be covalently attached to proteins as a monomer or as a lysine-linked polymer. Covalent attachment via an isopeptide bond to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can 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).
Cellular Location	Nucleus. Nucleus, PML body.

Tissue Location Broadly expressed..

Images



Western blot analysis of SUMO2/3 expression in HEK293T (A), A549 (B), U2OS (C), mouse brain (D), mouse testis (E), rat brain (F), rat testis (G) whole cell lysates. (Predicted band size: 10; 11 kD; Observed band size: 17 kD)



Immunofluorescent analysis of SUMO2/3 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.