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Rabbit Anti-Sumo 2+3 antibody

SL7338R

Product Name:	Sumo 2+3
Chinese Name:	Ubiquitin样蛋白Sumo2/3抗体
Alias:	HSMT3; MGC117191; OTTHUMP00000115275; OTTHUMP00000115276; OTTHUMP00000115277; Sentrin 2; Small ubiquitin like modifier 2; Small ubiquitin like modifier protein 3; Small ubiquitin related modifier 2; Small ubiquitin related modifier 3; SMT3 A; SMT3 B; SMT3 H1; SMT3 H2; SMT3 homolog 1; SMT3 homolog 2; SMT3 homolog; 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; Sumo 2; Sumo 3; Sumo2; Sumo3; Suppressor of mif two 3 homolog 2; Suppressor of mif two 3 homolog 3; Ubiquitin like protein SMT3A; Ubiquitin like protein SMT3B; SUMO2_HUMAN; SUMO3_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Cow,Horse,Rabbit,Zebrafish,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=3ug/testICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	10.9+10.5kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Sumo 2+3:21-95/95
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The small ubiquitin-related modifier (SUMO) proteins, which include SUMO-1, SUMO-2 and SUMO-3, belong to the ubiquitin-like protein family. Like ubiquitin, the SUMO proteins are synthesized as precursor proteins that undergo processing before conjugation to target proteins. Also, both utilize the E1, E2, and E3 cascade enzymes for conjugation. However, SUMO and ubiquitin differ with respect to targeting. Ubiquitination predominantly targets proteins for degradation, whereas sumoylation targets proteins to a variety of cellular processing, including nuclear transport, transcriptional regulation, apoptosis and protein stability. The unconjugated SUMO-1, SUMO-2 and SUMO-3 proteins localize to the nuclear membrane, nuclear bodies and cytoplasm, respectively. SUMO-1 utilizes Ubc9 for conjugation to several target proteins, which include IkBa, MDM2, p53, PML and Ran GAP1. SUMO-2 and SUMO-3 contribute to a greater percentage of protein modification than does SUMO-1, and unlike SUMO-1, they can form polymeric chains. In addition, SUMO-3 regulates b-Amyloid generation and may be critical in the onset or progression of Alzheimer's disease. **Function:** SUMO proteins, such as Sumo 2 and Sumo 3, post-translationally modify numerous cellular proteins and affect their metabolism and function. However, unlike ubiquitination, which targets proteins for degradation, sumoylation participates in a number of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. Sumo 2 and Sumo 3 are highly homologous, hence it is very difficult to produce antibodies which distinguish them. **Subunit:** Homotrimer (Potential). Crystal packing analysis suggests a possible trimeric assembly, of which the biological significance remains to be determined. Interacts with SAE2 and UBE2I. 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). **Subcellular Location:** Cytoplasmic (SUMO3) and Nuclear (SUMO2) **Tissue Specificity:** Broadly expressed. **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.

Similarity:
Belongs to the ubiquitin family. SUMO subfamily.
Contains 1 ubiquitin-like domain.

SWISS:
P61956

Gene ID:
6613

Database links:

Entrez Gene: 6612Human

Entrez Gene: 6613Human

Entrez Gene: 170930Mouse

Entrez Gene: 20610Mouse

Entrez Gene: 397044Pig

Entrez Gene: 499417Rat

Entrez Gene: 690244Rat

Omim: 602231Human

Omim: 603042Human

SwissProt: P61955Cow

SwissProt: P55854Human

SwissProt: P61956Human

SwissProt: P61957Mouse

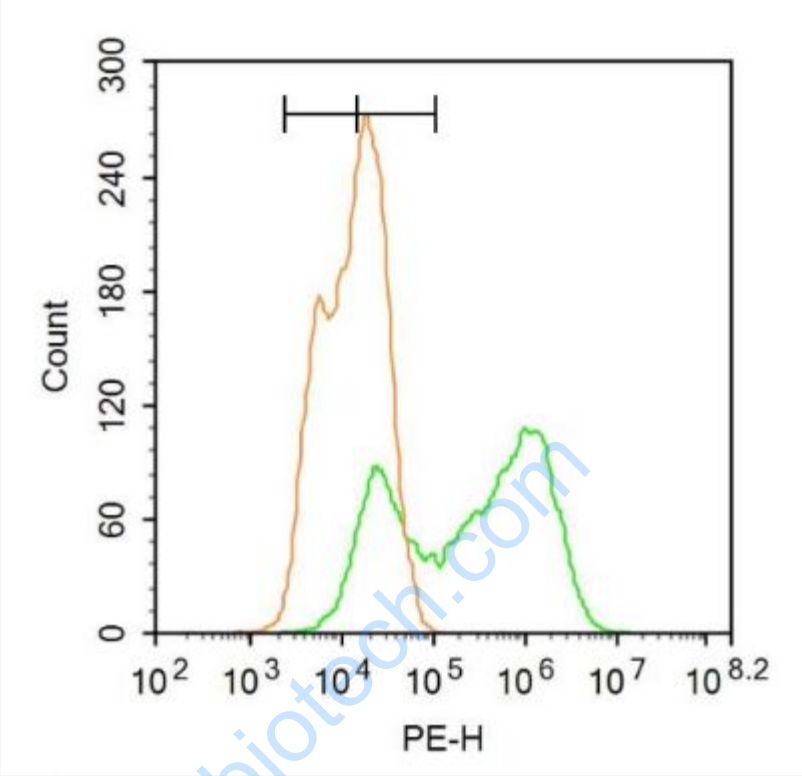
SwissProt: Q9Z172Mouse

SwissProt: P61958Pig

SwissProt: P61959Rat

SwissProt: Q5XIF4Rat

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	 Blank control:A549. Primary Antibody (green line): Rabbit Anti-SUMO3 antibody (SL7338R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-PE Dilution: 3μg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20℃. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.

	Acquisition of 20,000 events was performed.