OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AM50309PU-S

Sumo 2 (SUMO2) (+ SUMO3) Mouse Monoclonal Antibody [Clone ID: SM23/496]

Product data:

Product Type:	Primary Antibodies
Clone Name:	SM23/496
Applications:	FC, IF, IHC, IP, WB
Recommended Dilution:	**ELISA:** Use BSA free Antibody for coating. **Flow Cytometry:** 0.5-1 µg/million cells. **Immunofluorescence:** 0.5-1 µg/ml. **Western Blot:** 0.5-1 µg/ml. **Immunoprecipitation:** 0.5-1 µg/500 µg protein lysate. **Immunohistochemistry on Frozen Sections.** **Immunohistochemistry on Formalin-Fixed Sections:** 0.5-1 µg/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. ***Positive Control***: HeLa cells or breast carcinoma.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant Human SUMO2 protein.
Specificity:	This Monoclonal Antibody reacts with both SUMO-2 and SUMO-3. ***Cellular Localization***: Predominantly nuclear with some cytoplasmic.
Formulation:	10mM PBS State: Purified State: Liquid purified IgG fraction from Bioreactor Concentrate Stabilizer: 0.05% BSA Preservative: 0.05% Sodium Azide
Concentration:	lot specific
Purification:	Protein A/G Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C.

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Stability: Shelf life: one year from despatch.

Predicted Protein Size: 11-13 kDa

Gene Name: small ubiquitin-like modifier 2

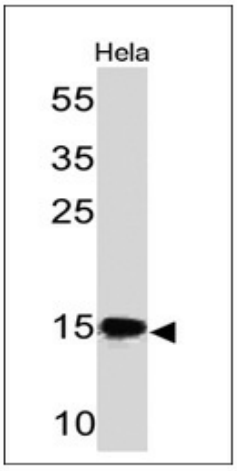
Database Link: Entrez Gene 6613 Human
P61956

Background: The small ubiquitin-related modifier (SUMO) proteins, which include SUMO-1, 2 and 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, 2 and 3 proteins localize to the nuclear membrane, nuclear bodies and cytoplasm, respectively. SUMO-1 utilizes Ubc9 for conjugation to several target proteins, which include MDM2, p53, PML and RanGap1. SUMO-2 and 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 beta-Amyloid generation and may be critical in the onset or progression of Alzheimer's disease.

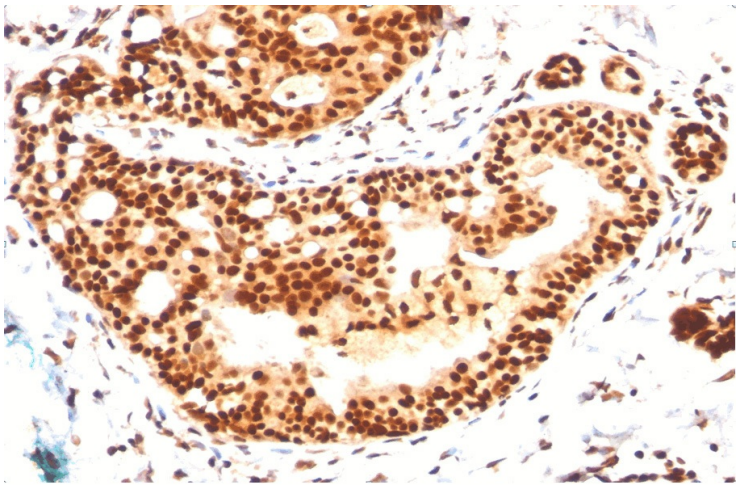
Synonyms: SMT3A, SMT3H2, HSMT3, SMT3 homolog 2, SUMO-3, Sentrin-2, Smt3A

Note: ***Hu Chromosome Location:*** 17q25.1 (SUMO-2) & 21q22.3 (SUMO-3)

Product images:



Western blot analysis of SUMO-2 using with SUMO-2/3 Antibody (Clone SM23/496).



Formalin-Fixed, Paraffin-Embedded Human tonsil stained with SUMO-2/3 Antibody (Clone SM23/496)