

Product datasheet for AM50170PU-T

OriGene Technologies, Inc.

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Sumo 2 (SUMO2) (+ SUMO3) Mouse Monoclonal Antibody [Clone ID: SPM572]

Product data:

Product Type: Primary Antibodies

Clone Name: SPM572

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 and 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.





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

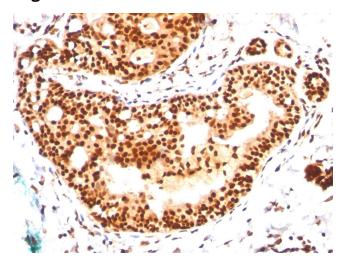
differ with respect to targeting. Ubiquitination predominantly targets proteins for degradation, whereas sumoylation targets proteins to a variety of cellular processing, including nuclear transport, transcriptional regulation, apoptosis and protein stability. The unconjugated SUMO-1, 2 and 3 proteins 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

Product images:



Formalin-Fixed, Paraffin-Embedded Human tonsil stained with SUMO-2/3 Antibody (Clone SPM572).