

## Product datasheet for **AM50309PU-T**

### 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: | <b>ELISA:</b> Use BSA free Antibody for coating.<br><b>Flow Cytometry:</b> 0.5-1 µg/million cells.<br><b>Immunofluorescence:</b> 0.5-1 µg/ml.<br><b>Western Blot:</b> 0.5-1 µg/ml.<br><b>Immunoprecipitation:</b> 0.5-1 µg/500 µg protein lysate.<br><b>Immunohistochemistry on Frozen Sections.</b><br><b>Immunohistochemistry on Formalin-Fixed Sections:</b> 0.5-1 µg/ml for 30 minutes at RT.<br>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.<br><b>Positive Control:</b> 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.<br><b>Cellular Localization:</b> Predominantly nuclear with some cytoplasmic.   |
| Formulation:          | 10mM PBS<br>State: Purified<br>State: Liquid purified IgG fraction from Bioreactor Concentrate<br>Stabilizer: 0.05% BSA<br>Preservative: 0.05% Sodium Azide  |
| Concentration:        | lot specific   |
| Purification:         | Protein A/G Chromatography   |
| Conjugation:          | Unconjugated   |
| Storage:              | Store undiluted at 2-8°C.  |



[View online »](#)

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** 11-13 kDa

**Gene Name:** small ubiquitin-like modifier 2

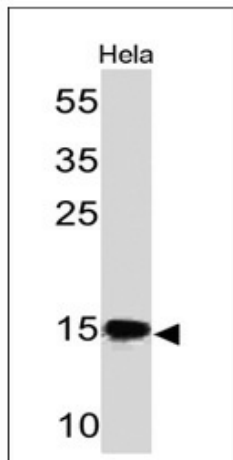
**Database Link:** [Entrez Gene 6613 Human P61956](#)

**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.

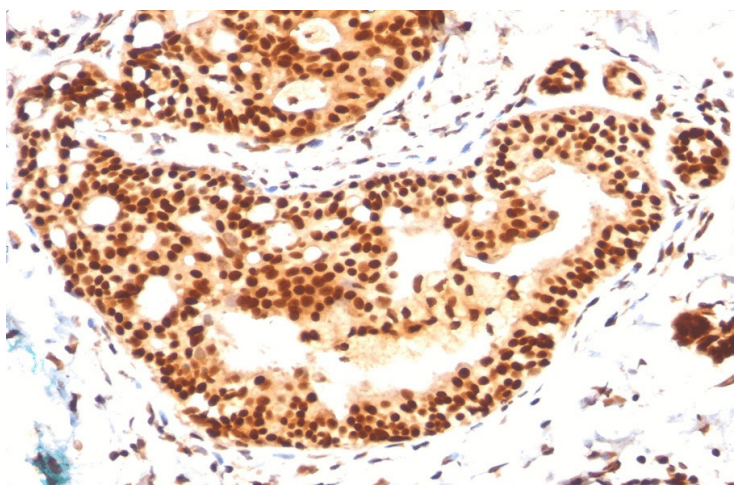
**Synonyms:** SMT3A, SMT3H2, HSMT3, SMT3 homolog 2, SUMO-3, Sentrin-2, Smt3A

**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)