

Product datasheet for **AP06463PU-N**

Sumo 1 (SUMO1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunohistochemistry on paraffin sections: 1/50-1/200. Immunofluorescence: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of Sumo1 protein. (region surrounding Ser2)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 12 kDa
Gene Name:	small ubiquitin-like modifier 1
Database Link:	Entrez Gene 7341 Human P63165



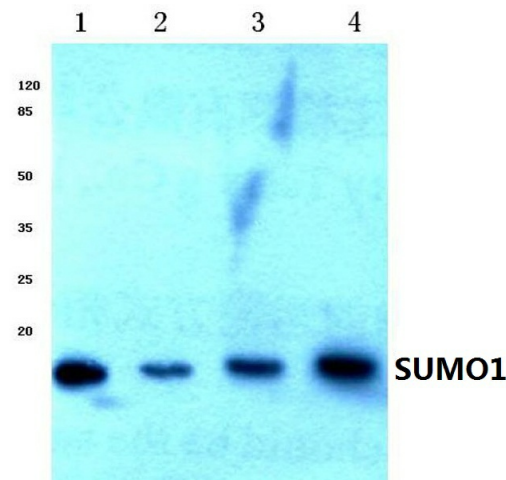
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Background:

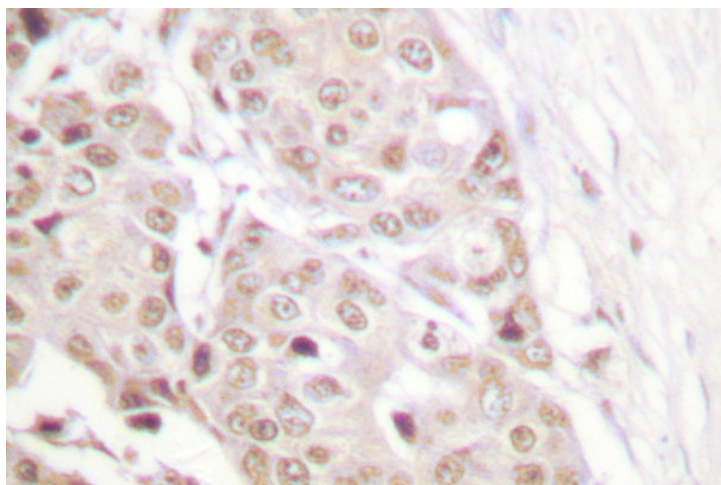
The small ubiquitin-related modifier (SUMO) proteins, which include SUMO-1, 2, and 3, belong to the ubiquitin-like protein family. Like ubiquitin, the SUMO proteins are synthesized as precursor proteins that undergo processing before conjugation to target proteins. Also, both utilize the E1, E2, and 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 are approximately 11 kDa in mass and localize to the nuclear membrane, nuclear bodies, and cytoplasm, respectively. SUMO-1 utilizes Ubc9 for conjugation to several target proteins, which include I κ B α , 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 Amyloid β generation and may be critical in the onset or progression of Alzheimer's disease.

Synonyms:

SMT3C, SMT3H3, UBL1, GMP1, SMT3 homolog 3, Sentrin

Product images:

Western blot (WB) analysis of SUMO1 antibody (Cat.-No.: AP06463PU-N) at 1/500 dilution Lane 1:HEK293T whole cell lysate Lane 2:HeLa whole cell lysate Lane 3:Mouse kidney tissue lysate Lane 4:Rat liver tissue lysate



Immunohistochemistry (IHC) analyzes of Sumo1 antibody (Cat.-No.: AP06463PU-N) in paraffin-embedded human breast carcinoma tissue.