10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# SUMO3 Antibody (N-term) Blocking peptide

**Synthetic peptide**
**Catalog # BP1286a**

## Specification

### SUMO3 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q9Z172

### SUMO3 Antibody (N-term) Blocking peptide - Additional Information

**Gene ID** 20610

**Other Names**
Small ubiquitin-related modifier 3, SUMO-3, SMT3 homolog 1 {ECO:0000312|MGI:MGI:1336201}, Ubiquitin-like protein SMT3A, Smt3A, Sumo3 {ECO:0000312|MGI:MGI:1336201}

**Target/Specificity**
The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP1286a>AP1286a</a> was selected from the N-term region of human Mouse SUMO3 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### SUMO3 Antibody (N-term) Blocking peptide - Protein Information

**Name** Sumo3 {ECO:0000312|MGI:MGI:1336201}

**Function**
Ubiquitin-like protein which can be covalently attached to target lysines either as a monomer or as a lysine-linked polymer. Does not seem to be involved in protein degradation and may function as an antagonist of ubiquitin in the degradation process. Plays a role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Covalent attachment to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by an E3 ligase such as PIAS1-4, RANBP2 or CBX4. Plays a role in the regulation of sumoylation status of SETX (By similarity).

**Cellular Location**
Cytoplasm. Nucleus. Nucleus, PML body

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## SUMO3 Antibody (N-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

## SUMO3 Antibody (N-term) Blocking peptide - Images

## SUMO3 Antibody (N-term) Blocking peptide - Background

Covalent attachment of one protein to another is one of the more prominent posttranslational modifications in respects to size and ubiquity ? to which eukaryotic proteins are subject. Ubiquitin is the most familiar of the protein modifiers and its activation and transfer to target proteins has been studied for over two decades. Recently a new group of ubiquitin-like (Ubl) proteins have come to light. One of the most intriguing of them is SUMO (small ubiquitin-like modifier, ~12kDa) also known as Sentrin. SUMO family has been described in vertebrates: SUMO-1 and the closest homologs SUMO-2 and SUMO-3. SUMO have been shown to bind and regulate mammalian SP-RINGs (such as Mdm2, PIAS and PML), RanGAP1, RanBP2, p53, p73, HIPK2, TEL, c-Jun, Fas, Daxx, TNFRI, Topo-I, Topo-II, WRN, Sp100, IkB-alpha, Androgen receptor (AR), GLUT1/4, Drosophila Ttk69, Dorsal, CaMK, yeast Septins, and viral CMV-IE1/2, EBV-BZLF1, HPV/BPV-E1. These bindings implicate SUMO in the stabilization of the target proteins and/or their localization to subcellular complexes. SUMO research enters now an exciting phase with a promise to help understanding how cells orchestrate the complexities of rapidly regulating protein level and activity.

## SUMO3 Antibody (N-term) Blocking peptide - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).Lapenta, V., et al., Genomics 40(2):362-366 (1997).