

SUMO3 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP1225a**Specification**

SUMO3 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P55854](#)**SUMO3 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 6612**Other Names**

Small ubiquitin-related modifier 3, SUMO-3, SMT3 homolog 1 {ECO:0000312|HGNC:HGNC:11124}, SUMO-2, Ubiquitin-like protein SMT3A, Smt3A, SUMO3 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=11124)
HGNC:11124

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1225a](/product/products/AP1225a) was selected from the C-term region of human 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 (C-term) Blocking Peptide - Protein Information**Name** SUMO3 ([HGNC:11124](#))**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 (PubMed: [11451954](http://www.uniprot.org/citations/11451954), PubMed: [18538659](http://www.uniprot.org/citations/18538659), PubMed: [21965678](http://www.uniprot.org/citations/21965678))

target="_blank">21965678). Plays a role in the regulation of sumoylation status of SETX (PubMed:24105744).

Cellular Location

Cytoplasm. Nucleus. Nucleus, PML body

Tissue Location

Expressed predominantly in liver.

SUMO3 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SUMO3 Antibody (C-term) Blocking Peptide - Images**SUMO3 Antibody (C-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 (C-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).