

**SUMO2/3 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1223d****Specification**

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**SUMO2/3 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [P55854](#)**SUMO2/3 Antibody (Center) 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](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=11124))

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1223d](/product/products/AP1223d) was selected from the Center region of human SUMO2/3. 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.

**SUMO2/3 Antibody (Center) 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</a>). Plays a role in the regulation of sumoylation status of SETX (PubMed:<a href="http://www.uniprot.org/citations/24105744" target="\_blank">24105744</a>).

**Cellular Location**

Cytoplasm. Nucleus. Nucleus, PML body

**Tissue Location**

Expressed predominantly in liver.

**SUMO2/3 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**SUMO2/3 Antibody (Center) Blocking Peptide - Images****SUMO2/3 Antibody (Center) Blocking Peptide - Background**

SUMO2 and SUMO3 are members of the SUMO (small ubiquitin-like modifier) protein family. This protein family functions in a manner similar to ubiquitin in that it is bound to target proteins as part of a post-translational modification system. However, unlike ubiquitin which targets proteins for degradation, this protein is involved in a variety of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. In vertebrates, three members of the SUMO family have been described, SUMO 1 and the functionally distinct homologues SUMO 2 and SUMO 3. SUMO modification sites present in the N terminal regions of SUMO 2 and SUMO 3 are utilized by SAE1/SAE2 (SUMO E1) and Ubc9 (SUMO E2) to form polymeric chains of SUMO 2 and SUMO 3 on protein substrates, a property not shared by SUMO 1.

**SUMO2/3 Antibody (Center) 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).Mannen, H., et al., Biochem. Biophys. Res. Commun. 222(1):178-180 (1996).