

**SEN1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1231a****Specification**

---

**SEN1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q9P0U3](#)**SEN1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 29843**Other Names**

Sentrin-specific protease 1, Sentrin/SUMO-specific protease SENP1, SENP1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1231a](/product/products/AP1231a) was selected from the C-term region of human SENP1. 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.

**SEN1 Antibody (C-term) Blocking Peptide - Protein Information****Name** SENP1**Function**

Protease that catalyzes two essential functions in the SUMO pathway (PubMed: [10652325](http://www.uniprot.org/citations/10652325), PubMed: [15199155](http://www.uniprot.org/citations/15199155), PubMed: [15487983](http://www.uniprot.org/citations/15487983), PubMed: [16253240](http://www.uniprot.org/citations/16253240), PubMed: [16553580](http://www.uniprot.org/citations/16553580), PubMed: [21829689](http://www.uniprot.org/citations/21829689), PubMed: [21965678](http://www.uniprot.org/citations/21965678), PubMed: [23160374](http://www.uniprot.org/citations/23160374), PubMed: [24943844](http://www.uniprot.org/citations/24943844), PubMed: [25406032](http://www.uniprot.org/citations/25406032), PubMed: [29506078](http://www.uniprot.org/citations/29506078)).

href="http://www.uniprot.org/citations/34048572" target="\_blank">34048572</a>, PubMed:<a href="http://www.uniprot.org/citations/37257451" target="\_blank">37257451</a>). The first is the hydrolysis of an alpha-linked peptide bond at the C-terminal end of the small ubiquitin-like modifier (SUMO) propeptides, SUMO1, SUMO2 and SUMO3 leading to the mature form of the proteins (PubMed:<a href="http://www.uniprot.org/citations/15487983" target="\_blank">15487983</a>). The second is the deconjugation of SUMO1, SUMO2 and SUMO3 from targeted proteins, by cleaving an epsilon-linked peptide bond between the C-terminal glycine of the mature SUMO and the lysine epsilon-amino group of the target protein (PubMed:<a href="http://www.uniprot.org/citations/15199155" target="\_blank">15199155</a>, PubMed:<a href="http://www.uniprot.org/citations/16253240" target="\_blank">16253240</a>, PubMed:<a href="http://www.uniprot.org/citations/21829689" target="\_blank">21829689</a>, PubMed:<a href="http://www.uniprot.org/citations/21965678" target="\_blank">21965678</a>, PubMed:<a href="http://www.uniprot.org/citations/23160374" target="\_blank">23160374</a>, PubMed:<a href="http://www.uniprot.org/citations/24943844" target="\_blank">24943844</a>, PubMed:<a href="http://www.uniprot.org/citations/25406032" target="\_blank">25406032</a>, PubMed:<a href="http://www.uniprot.org/citations/29506078" target="\_blank">29506078</a>, PubMed:<a href="http://www.uniprot.org/citations/34048572" target="\_blank">34048572</a>, PubMed:<a href="http://www.uniprot.org/citations/37257451" target="\_blank">37257451</a>). Deconjugates SUMO1 from HIPK2 (PubMed:<a href="http://www.uniprot.org/citations/16253240" target="\_blank">16253240</a>). Deconjugates SUMO1 from HDAC1 and BHLHE40/DEC1, which decreases its transcriptional repression activity (PubMed:<a href="http://www.uniprot.org/citations/15199155" target="\_blank">15199155</a>, PubMed:<a href="http://www.uniprot.org/citations/21829689" target="\_blank">21829689</a>). Deconjugates SUMO1 from CLOCK, which decreases its transcriptional activation activity (PubMed:<a href="http://www.uniprot.org/citations/23160374" target="\_blank">23160374</a>). Deconjugates SUMO2 from MTA1 (PubMed:<a href="http://www.uniprot.org/citations/21965678" target="\_blank">21965678</a>). Inhibits N(6)-methyladenosine (m6A) RNA methylation by mediating SUMO1 deconjugation from METTL3 and ALKBH5: METTL3 inhibits the m6A RNA methyltransferase activity, while ALKBH5 desumoylation promotes m6A demethylation (PubMed:<a href="http://www.uniprot.org/citations/29506078" target="\_blank">29506078</a>, PubMed:<a href="http://www.uniprot.org/citations/34048572" target="\_blank">34048572</a>, PubMed:<a href="http://www.uniprot.org/citations/37257451" target="\_blank">37257451</a>). Desumoylates CCAR2 which decreases its interaction with SIRT1 (PubMed:<a href="http://www.uniprot.org/citations/25406032" target="\_blank">25406032</a>). Deconjugates SUMO1 from GPS2 (PubMed:<a href="http://www.uniprot.org/citations/24943844" target="\_blank">24943844</a>).

### Cellular Location

Nucleus. Cytoplasm Note=Shuttles between cytoplasm and nucleus

### Tissue Location

Highly expressed in testis. Expressed at lower levels in thymus, pancreas, spleen, liver, ovary and small intestine

## SENP1 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

## SENP1 Antibody (C-term) Blocking Peptide - Images

## SENP1 Antibody (C-term) Blocking Peptide - Background

SENP1 is a protease that catalyzes two essential functions in the SUMO pathway: processing of full-length SUMO1, SUMO2 and SUMO3 to their mature forms and deconjugation of SUMO1, SUMO2 and SUMO3 from targeted proteins. SENP deconjugates SUMO1 from HIPK2 and from HDAC1, which

decreases the transcriptional repression activity of the latter.

#### **SENP1 Antibody (C-term) Blocking Peptide - References**

Gong, L., et al., J. Biol. Chem. 275(5):3355-3359 (2000). Bailey, D., et al., J. Gen. Virol. 83 (Pt 12), 2951-2964 (2002).