

**SENP1 Antibody**  
**Rabbit mAb**  
**Catalog # AP91872****Specification****SENP1 Antibody - Product Information**

Application	WB, IHC, FC, ICC
Primary Accession	<a href="#">Q9P0U3</a>
Clonality	Monoclonal
<b>Other Names</b>	
SENP1; SuPr2;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	73481 Da

**SENP1 Antibody - Additional Information**

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SENP1
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**SENP1 Antibody - Protein Information****Name** SENP1**Function**

Protease that catalyzes two essential functions in the SUMO pathway (PubMed:<a href="http://www.uniprot.org/citations/10652325" target="\_blank">10652325</a>, PubMed:<a href="http://www.uniprot.org/citations/15199155" target="\_blank">15199155</a>, PubMed:<a href="http://www.uniprot.org/citations/15487983" target="\_blank">15487983</a>, PubMed:<a href="http://www.uniprot.org/citations/16253240" target="\_blank">16253240</a>, PubMed:<a href="http://www.uniprot.org/citations/16553580" target="\_blank">16553580</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>). 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

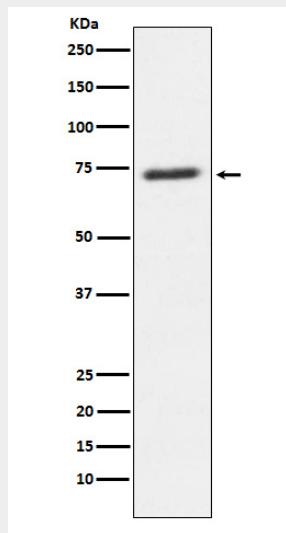
### SENP1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)

- [Cell Culture](#)

**SENP1 Antibody - Images**

Western blot analysis of SENP1 expression in U87-MG cell lysate.