

## SENP1 Polyclonal Antibody

Catalog # AP72419

### Specification

#### SENP1 Polyclonal Antibody - Product Information

Application	WB
Primary Accession	<a href="#">O9P0U3</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal

#### SENP1 Polyclonal Antibody - Additional Information

Gene ID 29843

#### Other Names

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

#### Dilution

WB~~Western Blot: 1/500 - 1/2000.  
Immunohistochemistry: 1/100 - 1/300.  
ELISA: 1/20000. Not yet tested in other applications.

#### Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

#### Storage Conditions

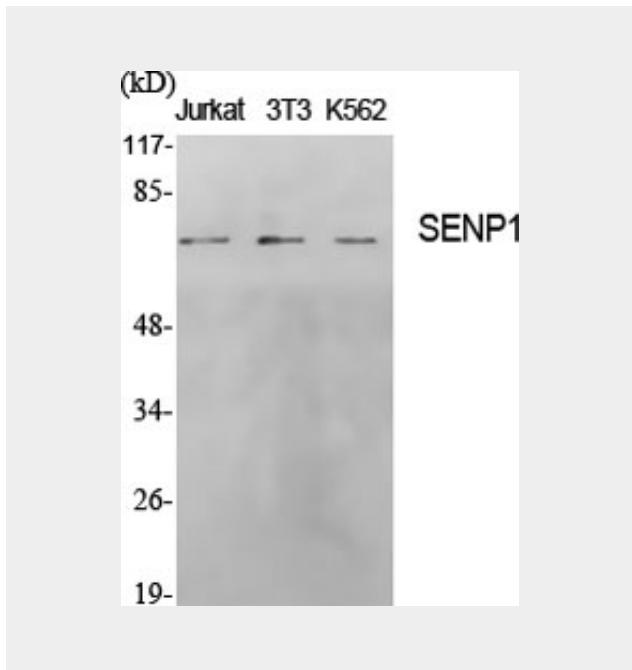
-20°C

#### SENP1 Polyclonal 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/16253240" target="\_blank">16253240</a>, PubMed:<a href="http://www.uniprot.org/citations/16553580" target="\_blank">16553580</a>)



#### SENP1 Polyclonal Antibody - Background

Protease that catalyzes two essential functions in the SUMO pathway (PubMed:10652325, PubMed:15199155, PubMed:16253240, PubMed:16553580, PubMed:21829689, PubMed:21965678, PubMed:23160374, PubMed:24943844, PubMed:25406032, PubMed:29506078). 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. 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. Deconjugates SUMO1 from HIPK2 (PubMed:16253240). Deconjugates SUMO1 from HDAC1 and BHLHE40/DEC1, which decreases its transcriptional repression activity (PubMed:21829689). Deconjugates SUMO1 from CLOCK, which decreases its transcriptional activation activity (PubMed:23160374). Deconjugates SUMO2

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>). 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. 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. 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/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>).  
Deconjugates SUMO1 from METTL3 (PubMed:<a href="http://www.uniprot.org/citations/29506078"  
target="\_blank">>29506078</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

from MTA1 (PubMed:21965678). Deconjugates SUMO1 from METTL3 (PubMed:29506078). Desumoylates CCAR2 which decreases its interaction with SIRT1 (PubMed:25406032). Deconjugates SUMO1 from GPS2 (PubMed:24943844).

(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 Polyclonal 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](#)