

Anti-SENP1 Antibody
Rabbit polyclonal antibody to SENP1
Catalog # AP59836

Specification

Anti-SENP1 Antibody - Product Information

Application	WB, IHC
Primary Accession	Q9P0U3
Reactivity	Human, Monkey, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	73481

Anti-SENP1 Antibody - Additional Information

Gene ID 29843

Other Names

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

Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human SENP1. The exact sequence is proprietary.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)
IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C.Stable for 12 months from date of receipt

Anti-SENP1 Antibody - Protein Information

Name SENP1

Function

Protease that catalyzes two essential functions in the SUMO pathway (PubMed:10652325, PubMed:15199155, PubMed:15487983, PubMed:16253240, PubMed:16553580, PubMed:21829689, PubMed:21965678, PubMed:23160374, PubMed:24943844, PubMed:25406032, PubMed:29506078, PubMed:34048572, PubMed:37257451). 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:15487983). 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:15199155, PubMed:16253240, PubMed:21829689, PubMed:21965678, PubMed:23160374, PubMed:24943844, PubMed:25406032, PubMed:29506078, PubMed:34048572, PubMed:37257451). Deconjugates SUMO1 from HIPK2 (PubMed:16253240). Deconjugates SUMO1 from HDAC1 and BHLHE40/DEC1, which decreases its transcriptional repression activity (PubMed:15199155, PubMed:21829689). Deconjugates SUMO1 from CLOCK, which decreases its transcriptional activation activity (PubMed:23160374). Deconjugates SUMO2 from MTA1 (PubMed:21965678). 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:29506078, PubMed:34048572, PubMed:37257451). Desumoylates CCAR2 which decreases its interaction with SIRT1 (PubMed:25406032). Deconjugates SUMO1 from GPS2 (PubMed:24943844).

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

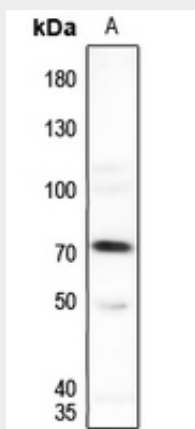
Anti-SENP1 Antibody - Protocols

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

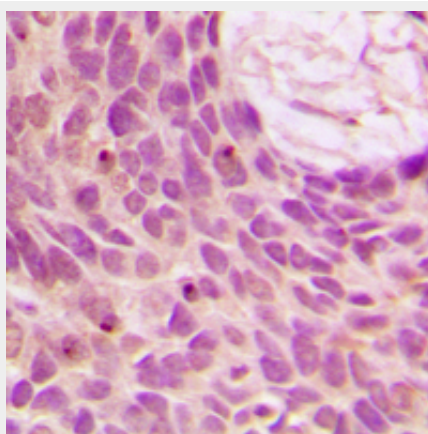
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-SENP1 Antibody - Images



Western blot analysis of SENP1 expression in HeLa (A) whole cell lysates.



Immunohistochemical analysis of SENP1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-SENP1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human SENP1. The exact sequence is proprietary.