

### SENP6 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1239a

### Specification

# SENP6 Antibody (C-term) - Product Information

Application Primary Accession	IHC-P, WB,E <u>09GZR1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1081-1112

## SENP6 Antibody (C-term) - Additional Information

#### Gene ID 26054

**Other Names** Sentrin-specific protease 6, SUMO-1-specific protease 1, Sentrin/SUMO-specific protease SENP6, SENP6, KIAA0797, SSP1, SUSP1

#### Target/Specificity

This SENP6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1081-1112 amino acids from the C-terminal region of human SENP6.

**Dilution** IHC-P~~1:100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

SENP6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# SENP6 Antibody (C-term) - Protein Information

Name SENP6

Synonyms KIAA0797, SSP1, SUSP1



**Function** Protease that deconjugates SUMO1, SUMO2 and SUMO3 from targeted proteins. Processes preferentially poly-SUMO2 and poly-SUMO3 chains, but does not efficiently process SUMO1, SUMO2 and SUMO3 precursors. Deconjugates SUMO1 from RXRA, leading to transcriptional activation. Involved in chromosome alignment and spindle assembly, by regulating the kinetochore CENPH-CENPI-CENPK complex. Desumoylates PML and CENPI, protecting them from degradation by the ubiquitin ligase RNF4, which targets polysumoylated proteins for proteasomal degradation. Also desumoylates RPA1, thus preventing recruitment of RAD51 to the DNA damage foci to initiate DNA repair through homologous recombination.

**Cellular Location** Nucleus

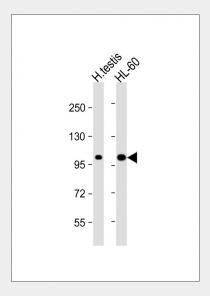
**Tissue Location** Highly expressed in reproductive organs, such as testis, ovary and prostate

## SENP6 Antibody (C-term) - Protocols

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

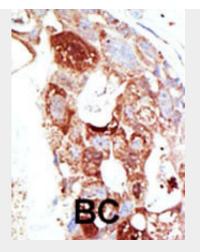
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SENP6 Antibody (C-term) - Images

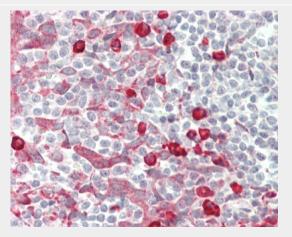


All lanes : Anti-SENP6 Antibody (E1096) at 1:1000 dilution Lane 1: human testis lysate Lane 2: HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 126 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Formalin-fixed and paraffin-embedded H.tonsil tissue reacted with SENP6 Antibody (C-term) (Cat#AP1239a).

# SENP6 Antibody (C-term) - Background

SENP6 (SUSP1) is a protease that deconjugates SUMO1, SUMO2 and SUMO3 from targeted proteins. This protein does not seem to be involved in the processing of full-length SUMO proteins to their mature conjugatable forms. SENP6 deconjugates SUMO1 from RXRA, leading to transcriptional activation. It may act preferentially on substrates containing 3 or more SUMO2 or SUMO3 moieties.

### SENP6 Antibody (C-term) - References

Ota, T., et al., Nat. Genet. 36(1):40-45 (2004). Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Kim, K.I., et al., J. Biol. Chem. 275(19):14102-14106 (2000). SENP6 Antibody (C-term) - Citations

- HSP70-Hrd1 axis precludes the oncorepressor potential of N-terminal misfolded Blimp-1s in lymphoma cells.
- SUMOylation of hnRNP-K is required for p53-mediated cell-cycle arrest in response to DNA damage.
- <u>Regulation of the SUMO pathway sensitizes differentiating human endometrial stromal cells</u> to progesterone.



• <u>Negative modulation of RXRalpha transcriptional activity by small ubiquitin-related modifier</u> (SUMO) modification and its reversal by SUMO-specific protease SUSP1.