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SENP6 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1239a

Product Information

Application	IHC-P, WB, E
Primary Accession	Q9GZR1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	126146
Antigen Region	1081-1112

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~~1:100~500 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.

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

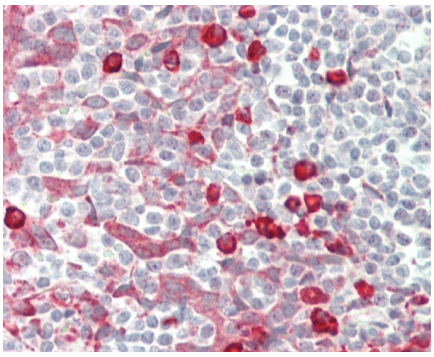
Background

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.

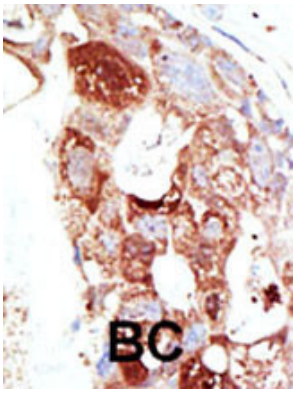
References

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).

Images



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



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.

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.

- Regulation of the SUMO pathway sensitizes differentiating human endometrial stromal cells to progesterone.
- Negative modulation of RXRalpha transcriptional activity by small ubiquitin-related modifier (SUMO) modification and its reversal by SUMO-specific protease SUSP1.