

## SENP2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1232a

## Specification

# SENP2 Antibody (N-term) - Product Information

Application	IHC-P,E
Primary Accession	<u>Q9HC62</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	2-32

## SENP2 Antibody (N-term) - Additional Information

### Gene ID 59343

**Other Names** Sentrin-specific protease 2, Axam2, SMT3-specific isopeptidase 2, Smt3ip2, Sentrin/SUMO-specific protease SENP2, SENP2, KIAA1331

## Target/Specificity

This SENP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 2-32 amino acids from the N-terminal region of human SENP2.

Dilution IHC-P~~1:10~50

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

SENP2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# SENP2 Antibody (N-term) - Protein Information

Name SENP2 {ECO:0000303|PubMed:10718198, ECO:0000312|HGNC:HGNC:23116}

**Function** Protease that catalyzes two essential functions in the SUMO pathway (PubMed:<u>11896061</u>, PubMed:<u>12192048</u>, PubMed:<u>15296745</u>, PubMed:<u>20194620</u>, PubMed:<u>21965678</u>). 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:<u>15296745</u>). 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:<u>15296745</u>, PubMed:<u>20194620</u>, PubMed:<u>21965678</u>). May down- regulate CTNNB1 levels and thereby modulate the Wnt pathway (By similarity). Deconjugates SUMO2 from MTA1 (PubMed:<u>21965678</u>). Plays a dynamic role in adipogenesis by desumoylating and promoting the stabilization of CEBPB (PubMed:<u>20194620</u>). Acts as a regulator of the cGAS-STING pathway by catalyzing desumoylation of CGAS and STING1 during the late phase of viral infection (By similarity).

### **Cellular Location**

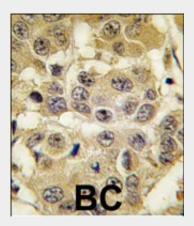
Nucleus, nuclear pore complex. Nucleus membrane; Peripheral membrane protein; Nucleoplasmic side. Cytoplasm Note=Shuttles between cytoplasm and nucleus

## SENP2 Antibody (N-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>

### SENP2 Antibody (N-term) - Images



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with SENP2 antibody (N-term), 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.

### SENP2 Antibody (N-term) - Background

SUMO is a small ubiquitin-like protein that can be covalently conjugated to other proteins. SENP2 is one of a group of enzymes that process newly synthesized SUMO1, SUMO2, and SUMO3 into the conjugatable mature forms and catalyze the deconjugation of these same SUMO proteins from their targeted substrates. SENP2 may also down-regulate CTNNB1 levels and thereby modulate the Wnt



pathway.

## SENP2 Antibody (N-term) - References

Zhang, H., et al., Mol. Cell. Biol. 22(18):6498-6508 (2002). Hang, J., et al., J. Biol. Chem. 277(22):19961-19966 (2002). Nishida, T., et al., J. Biol. Chem. 276(42):39060-39066 (2001).