

SEN2 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1232c**Specification**

SEN2 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q9HC62
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	67855
Antigen Region	502-533

SEN2 Antibody (C-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 502-533 amino acids from the C-terminal region of human SENP2.

DilutionWB~~1:1000
IHC-P~~1:50~100**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

SEN2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SEN2 Antibody (C-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:[11896061](#), PubMed:[12192048](#), PubMed:[20194620](#), PubMed:[21965678](#), PubMed:[15296745](#)). 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:[15296745](#)). 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:[20194620](#), PubMed:[21965678](#), PubMed:[15296745](#)). May down- regulate CTNNB1 levels and thereby modulate the Wnt pathway (By similarity). Deconjugates SUMO2 from MTA1 (PubMed:[21965678](#)). Plays a dynamic role in adipogenesis by desumoylating and promoting the stabilization of CEBPB (PubMed:[20194620](#)). 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

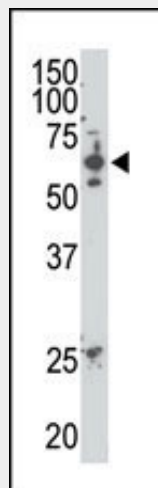
Nucleus, nuclear pore complex. Nucleus membrane; Peripheral membrane protein; Nucleoplasmic side. Cytoplasm Note=Shuttles between cytoplasm and nucleus

SEN2 Antibody (C-term) - Protocols

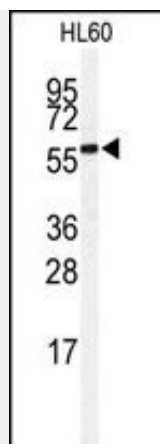
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

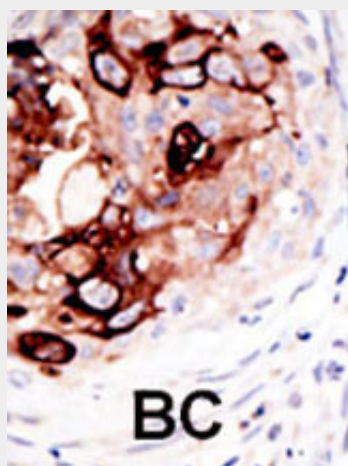
SEN2 Antibody (C-term) - Images



The SEN2 C-term polyclonal antibody (Cat. #AP1232c) is used in Western blot to detect SEN2 in mouse heart tissue lysate.



Western blot analysis of anti-SEN2 Antibody (C-term)(Cat. #AP1232c) in HL60 cell line lysates (35ug/lane). SEN2(arrow) was detected using the purified Pab.



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

SEN2 Antibody (C-term) - Background

SUMO is a small ubiquitin-like protein that can be covalently conjugated to other proteins. SEN2 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. SEN2 may also down-regulate CTNNB1 levels and thereby modulate the Wnt pathway.

SEN2 Antibody (C-term) - References

- Ota, T., et al., Nat. Genet. 36(1):40-45 (2004).
- Nakajima, D., et al., DNA Res. 9(3):99-106 (2002).
- Zhang, H., et al., Mol. Cell. Biol. 22(18):6498-6508 (2002).
- Hang, J., et al., J. Biol. Chem. 277(22):19961-19966 (2002).
- Nagase, T., et al., DNA Res. 7(1):65-73 (2000).

SEN2 Antibody (C-term) - Citations

- [SEN1 and SEN2 regulate SUMOylation of amyloid precursor protein.](#)
- [Extraembryonic but not embryonic SUMO-specific protease 2 is required for heart development.](#)

- [Developmental control of sumoylation pathway proteins in mouse male germ cells.](#)