

Product datasheet for **AP06459PU-N**

SENP5 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunohistochemistry on paraffin sections 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of SENP5 protein. (region surrounding Leu681)
Formulation:	Phosphate Buffered Saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (>95% pure by SDS-PAGE). Preservative: 15mM Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Predicted Protein Size:	~80 kDa
Gene Name:	SUMO1/sentrin specific peptidase 5
Database Link:	<u>Entrez Gene 320213 Mouse</u> <u>Entrez Gene 303874 Rat</u> <u>Entrez Gene 205564 Human</u> <u>Q96HI0</u>



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Background:

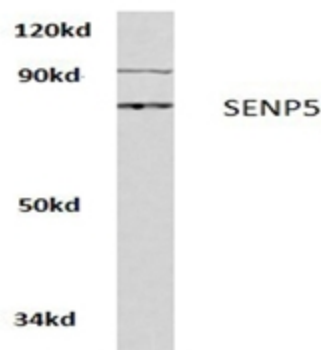
SUMO (small ubiquitin-related modifier), a member of the ubiquitin-like protein family, regulates diverse cellular functions of a variety of target proteins, including transcription, DNA repair, nucleocytoplasmic trafficking and chromosome segregation. SUMO precursor proteins undergo cleavage of the residues after the “GG” region by SUMO-specific proteases in maturation. This cleavage of the precursor is a prerequisite for subsequent sumoylation. The sentrin-specific (or SUMO-specific) protease (SEN5) proteins belong to the peptidase C48 family and include SENP1-3 and SENP5-8. SENP1, SENP2 and SENP3 degrade UBL1 and SMT3H2 conjugates and subsequently release the monomers from sumoylated substrates. HIPK2 is a desumoylation target for SENP1 which shuttles between the cytoplasm and the nucleus. Mutation analyses reveal that SENP1 contains the nuclear export sequence (NES) within the extreme carboxyl-terminal region, and SENP1 is exported to the cytoplasm in a NES-dependent manner. SENP2 has been implicated as a downregulator of CTNNB1 levels and may therefore be a modulator of the Wnt pathway. SUMO protease SENP3 reverses the sumoylation of MEF2 to augment its transcriptional and myogenic activities. SENP5 localizes to the nucleolus and preferentially processes SUMO-3. It is thought to play a role in mitosis and/or cytokinesis. SENP6 localizes to the cytoplasm and releases SUMO-1. Expression of SENP6 is higher in reproductive organs, indicating that it may mediate processes related to reproduction. SENP8 is involved in the release of sentrins.

Synonyms:

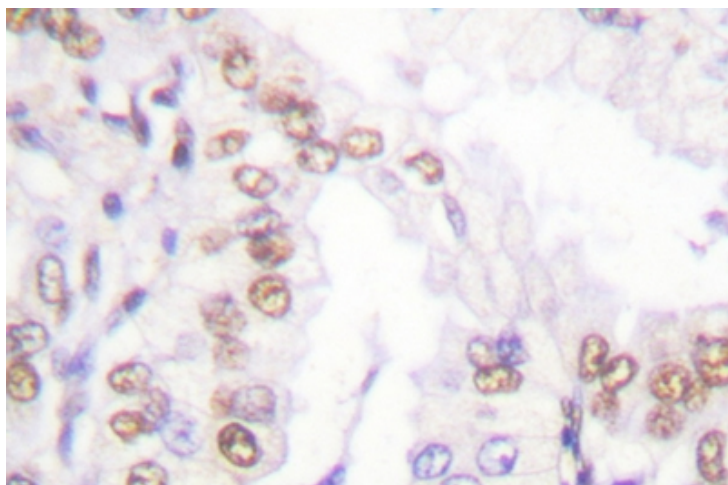
Sentrin-specific protease 5

Protein Families:

Druggable Genome, Protease

Product images:

Western blot (WB) analysis of SENP5 antibody (Cat.-No.: AP06459PU-N) in extracts from PC12 cells.



Immunohistochemistry (IHC) analyzes of SEN5 antibody (Cat.-No.: AP06459PU-N) in paraffin-embedded human lung carcinoma tissue.