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Mouse Senp1 Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19695c

Product Information

Application	WB, E
Primary Accession	P59110
Other Accession	NP_659100.1
Reactivity	Mouse
Predicted	Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40856
Calculated MW	72511
Antigen Region	262-289

Additional Information

Gene ID	223870
Other Names	Sentrin-specific protease 1, SUMO-1 protease 2, SuPr-2, Sentrin/SUMO-specific protease SENP1, Senp1, Supr2
Target/Specificity	This Mouse Senp1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 262-289 amino acids from the Central region of mouse Senp1.
Dilution	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 purified through a protein A column, followed by peptide affinity purification.
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	Mouse Senp1 Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Senp1
Synonyms	Supr2

Function	Protease that catalyzes two essential functions in the SUMO pathway (PubMed:15923632, PubMed:29499132). 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 (By similarity). 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 (By similarity). Deconjugates SUMO1 from HIPK2 (By similarity). Deconjugates SUMO1 from HDAC1 and BHLHE40/DEC1, which decreases its transcriptional repression activity (By similarity). Deconjugates SUMO1 from CLOCK, which decreases its transcriptional activation activity (By similarity). Deconjugates SUMO2 from MTA1 (By similarity). Inhibits N(6)-methyladenosine (m6A) RNA methylation by mediating SUMO1 deconjugation from METTL3 and ALKBH5: METTL3 inhibits the m6A RNA methyltransferase activity, while ALKBH5 desumoylation promotes m6A demethylation (By similarity). Desumoylates CCAR2 which decreases its interaction with SIRT1 (By similarity). Deconjugates SUMO1 from GPS2 (PubMed:29499132).
Cellular Location	Nucleus {ECO:0000250|UniProtKB:Q9P0U3}. Cytoplasm {ECO:0000250|UniProtKB:Q9P0U3}. Note=Shuttles between cytoplasm and nucleus. {ECO:0000250|UniProtKB:Q9P0U3}

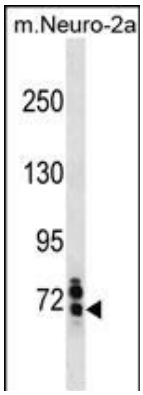
Background

Protease that catalyzes two essential functions in the SUMO pathway: processing of full-length SUMO1, SUMO2 and SUMO3 to their mature forms and deconjugation of SUMO1, SUMO2 and SUMO3 from targeted proteins. Deconjugates SUMO1 from HIPK2. Deconjugates SUMO1 from HDAC1, which decreases its transcriptional repression activity.

References

Bawa-Khalfe, T., et al. J. Biol. Chem. 285(33):25859-25866(2010)
Yu, L., et al. J. Exp. Med. 207(6):1183-1195(2010)
Sharma, P., et al. J. Cell. Sci. 123 (PT 8), 1227-1234 (2010) :
Li, X., et al. Cell Death Differ. 15(4):739-750(2008)
Cheng, J., et al. Cell 131(3):584-595(2007)

Images



Mouse Senp1 Antibody (Center) (Cat. #AP19695c) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane).This demonstrates the Mouse Senp1 antibody detected the Mouse Senp1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.