

SENP2 Polyclonal Antibody

Catalog # AP72420

Product Information

Application	WB, IHC-P
Primary Accession	<u>Q9HC62</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67855

Additional Information

Gene ID	59343
Other Names	SENP2; KIAA1331; Sentrin-specific protease 2; Axam2; SMT3-specific isopeptidase 2; Smt3ip2; Sentrin/SUMO-specific protease SENP2
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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).

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

Background

Protease that catalyzes two essential functions in the SUMO pathway. 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. 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. May down-regulate CTNNB1 levels and thereby modulate the Wnt pathway. Deconjugates SUMO2 from MTA1. Plays a dynamic role in adipogenesis by desumoylating and promoting the stabilization of CEBPB (PubMed:20194620).

Images



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