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SENP3 Rabbit pAb

Catalog # AP99382

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9H4L4
Other Accession	Q9H4L4
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65010
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SENP3
Epitope Specificity	471-574/574
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase C48 family.
SUBUNIT	Binds to SUMO1 and SUMO3 (By similarity). Component of some MLL1/MLL complex, at least composed of the core components MLL, ASH2L, HCFC1/HCF1, WDR5 and RBBP5, as well as the facultative components BAP18, CHD8, E2F6, HSP70, INO80C, KANSL1, LAS1L, MAX, MCRS1, MGA, MYST1/MOF, PELP1, PHF20, PRP31, RING2, RUVB1/TIP49A, RUVB2/TIP49B, SENP3, TAF1, TAF4, TAF6, TAF7, TAF9 and TEX10. Interacts with EP300, NPM1 and CDCA8. Component of the 5FMC complex, at least composed of PELP1, LAS1L, TEX10, WDR18 and SENP3; the complex interacts with methylated CHTOP and ZNF148. Interacts with NOL9.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The SENP3 protease releases SUMO2 and SUMO3 monomers from sumoylated substrates, but has only weak activity against SUMO1 conjugates. It deconjugates SUMO2 from MEF2D, which increases its transcriptional activation capability.

Additional Information

Gene ID	26168
Other Names	SMT3IP1; SSP3; Ulp1; Smt3ip; SENP3_HUMAN; SENP3; SUMO-1-specific protease 3; Sentrin/SUMO-specific protease SENP3; 3.4.22.-; SUSP3; SENP3_MOUSE; Smt3-specific isopeptidase 1 (Smt3ip1); SUMO specific peptidase 3; SUMO1/sentrin/SMT3 specific protease 3; SUMO1/sentrin/SMT3 specific peptidase 3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SENP3
Function	Protease that releases SUMO2 and SUMO3 monomers from sumoylated substrates, but has only weak activity against SUMO1 conjugates (PubMed:16608850, PubMed:32832608, PubMed:36050397). Deconjugates SUMO2 from MEF2D, which increases its transcriptional activation capability (PubMed:15743823). Deconjugates SUMO2 and SUMO3 from CDCA8 (PubMed:18946085). Redox sensor that, when redistributed into nucleoplasm, can act as an effector to enhance HIF1A transcriptional activity by desumoylating EP300 (PubMed:19680224). Required for rRNA processing through deconjugation of SUMO2 and SUMO3 from nucleophosmin, NPM1 (PubMed:19015314). Plays a role in the regulation of sumoylation status of ZNF148 (PubMed:18259216). Functions as a component of the Five Friends of Methylated CHTOP (5FMC) complex; the 5FMC complex is recruited to ZNF148 by methylated CHTOP, leading to desumoylation of ZNF148 and subsequent transactivation of ZNF148 target genes (PubMed:22872859). Deconjugates SUMO2 from KAT5 (PubMed:32832608). Catalyzes desumoylation of MRE11 (PubMed:36050397).
Cellular Location	Nucleus, nucleolus. Nucleus, nucleoplasm. Cytoplasm {ECO:0000250|UniProtKB:Q9EP97} Note=Redistributes between the nucleolus and the nucleoplasm in response to mild oxidative stress (PubMed:19680224). Mainly found in the nucleoplasm, with low levels detected in the cytoplasmic and chromatin fractions (By similarity). {ECO:0000250|UniProtKB:Q9EP97, ECO:0000269|PubMed:19680224}

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