

USP9X Rabbit mAb

Catalog # AP77973

Product Information

Application	WB, IHC-P, IF, FC, ICC
Primary Accession	Q93008
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human USP9x
Purification	Affinity Chromatography
Calculated MW	290463

Additional Information

Gene ID	8239
Other Names	USP9X
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	USP9X {ECO:0000303 PubMed:18254724, ECO:0000312 HGNC:HGNC:12632}
Function	Deubiquitinase involved both in the processing of ubiquitin precursors and of ubiquitinated proteins (PubMed: 18254724 , PubMed: 19135894 , PubMed: 22371489 , PubMed: 25944111 , PubMed: 29626158 , PubMed: 30914461 , PubMed: 37454738). May therefore play an important regulatory role at the level of protein turnover by preventing degradation of proteins through the removal of conjugated ubiquitin (PubMed: 18254724 , PubMed: 19135894 , PubMed: 22371489 , PubMed: 25944111 , PubMed: 29626158 , PubMed: 30914461 , PubMed: 37454738). Specifically hydrolyzes 'Lys-11'-, followed by 'Lys-63'-, 'Lys-48'- and 'Lys-6'- linked polyubiquitins chains (PubMed: 30914461). Essential component of TGF-beta/BMP signaling cascade (PubMed: 19135894). Specifically deubiquitinates monoubiquitinated SMAD4, opposing the activity of E3 ubiquitin-protein ligase TRIM33 (PubMed: 19135894). Deubiquitinates

alkylation repair enzyme ALKBH3 (PubMed:[25944111](#)). OTUD4 recruits USP7 and USP9X to stabilize ALKBH3, thereby promoting the repair of alkylated DNA lesions (PubMed:[25944111](#)). Deubiquitinates RNA demethylase enzyme ALKBH5, promoting its stability (PubMed:[37454738](#)). Deubiquitinates mTORC2 complex component RICTOR at 'Lys-294' by removing 'Lys-63'-linked polyubiquitin chains, stabilizing RICTOR and enhancing its binding to MTOR, thus promoting mTORC2 complex assembly (PubMed:[33378666](#)). Regulates chromosome alignment and segregation in mitosis by regulating the localization of BIRC5/survivin to mitotic centromeres (PubMed:[16322459](#)). Involved in axonal growth and neuronal cell migration (PubMed:[24607389](#)). Regulates cellular clock function by enhancing the protein stability and transcriptional activity of the core circadian protein BMAL1 via its deubiquitinating activity (PubMed:[29626158](#)). Acts as a regulator of peroxisome import by mediating deubiquitination of PEX5: specifically deubiquitinates PEX5 monoubiquitinated at 'Cys-11' following its retrotranslocation into the cytosol, resetting PEX5 for a subsequent import cycle (PubMed:[22371489](#)). Deubiquitinates PEG10 (By similarity). Inhibits the activation of the Hippo signaling pathway via deubiquitination of AMOTL2 at 'Lys-347' and 'Lys-408' which prohibits its interaction with and activation of LATS2. Loss of LATS2 activation and subsequent loss of YAP1 phosphorylation results in an increase in YAP1-driven transcription of target genes (PubMed:[26598551](#), PubMed:[34404733](#)).

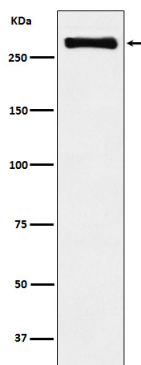
Cellular Location

Cytoplasm, cytosol. Cell projection, growth cone. Cytoplasm, cytoskeleton, cilium axoneme

Tissue Location

Widely expressed in embryonic and adult tissues.

Images



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