10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-USP9x Rabbit Monoclonal Antibody

Catalog # ABO15312

Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	Q93008
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-USP9x Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	8239
Other Names	Ubiquitin carboxyl-terminal hydrolase 9X, 3.4.19.12, Deubiquitinating enzyme FAF-X, Fat facets in mammals, hFAM, Fat facets protein-related, X-linked, Ubiquitin thioesterase FAF-X, Ubiquitin-specific protease 9, X chromosome, Ubiquitin-specific-processing protease FAF-X, USP9X {ECO:0000303|PubMed:18254724, ECO:0000312|HGNC:HGNC:12632}
Calculated MW	290463
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 FC 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 18U88
Immunogen	A synthesized peptide derived from human USP9x
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated 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).

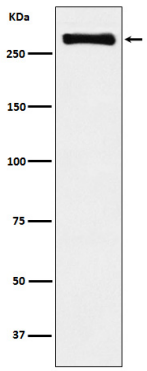
Cellular Location

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

Tissue Location

Widely expressed in embryonic and adult tissues.

Images



Western blot analysis of USP9x expression in HeLa cell lysate.

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