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USP9X antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14384

Product Information

Application	WB, IHC
Primary Accession	Q93008
Other Accession	NM_001039590, NP_001034679
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Chicken, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	290463

Additional Information

Gene ID	8239
Alias Symbol	DFFRX, FAF, FAM
Other Names	Probable ubiquitin carboxyl-terminal hydrolase FAF-X, 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, DFFRX, FAM, USP9
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-USP9X antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	USP9X antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

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

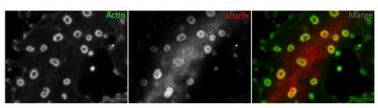
Tissue Location

Widely expressed in embryonic and adult tissues.

References

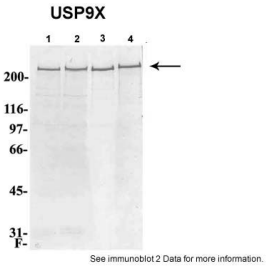
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Jones M.H.,et al.Hum. Mol. Genet. 6:334-335(1996).
Ross M.T.,et al.Nature 434:325-337(2005).
Yu W.,et al.Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
Rush J.,et al.Nat. Biotechnol. 23:94-101(2005).

Images



mouse 3T3 s

Sample Type: 1. total HeLa cell extract (100ug)2. total HeLa cell extract incubated with HA-UbVME (100ug)3. Rat Liver cytosolic extract (100ug)4. Rat Liver cytosolic extract



See immunoblot 2 Data for more information.

incubated with HA-UbVME (100ug)Primary Dilution: 1:1000
Secondary Antibody: alkaline phosphatase-conjugated anti-rabbitSecondary Dilution: 1:1000Image Submitted by: Andreia CarvalhoIBMC-OBF, Portugal

Citations

- Proteome-wide changes induced by the Hsp90 inhibitor, geldanamycin in anaplastic large cell lymphoma cells.

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