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# USP9X antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14384

## Product Information

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| **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

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| **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

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| **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

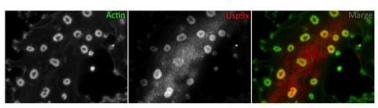
**Tissue Location**

Widely expressed in embryonic and adult tissues.

## References

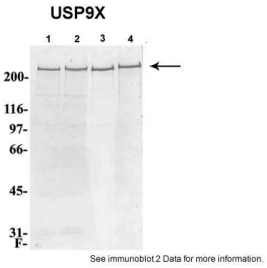

Jones M.H.,et al.Hum. Mol. Genet. 5:1695-1701(1996).
Jones M.H.,et al.Hum. Mol. Genet. 6:334-335(1996).
Ross M.T.,et al.Nature 434:325-337(2005).
Yu W.,et al.Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
Rush J.,et al.Nat. Biotechnol. 23:94-101(2005).


## 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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