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USP9X Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59205

Specification

USP9X Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, E**
Primary Accession	Q93008
Reactivity	**Rat, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**292 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human USP9X**
Epitope Specificity	**65-170/2570**
Isotype	**IgG**

Purity
affinity purified by Protein A

Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cytoplasm.**
SIMILARITY	**Belongs to the peptidase C19 family.**
SUBUNIT	**Interacts with SMAD4, MARK4, NUAK1 and BIRC5/survivin.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
This gene is a member of the peptidase C19 family and encodes a protein that is similar to ubiquitin-specific proteases. Though this gene is located on the X chromosome, it escapes X-inactivation. Mutations in this gene have been associated with Turner syndrome. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

USP9X Polyclonal Antibody - Additional Information

Gene ID 8239

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 (HGNC:12632), DFFRX, FAM, USP9

Target/Specificity
Widely expressed in embryonic and adult tissues.

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Storage
Store at -20 ℃ 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 ℃.

USP9X Polyclonal Antibody - 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:<a

href="http://www.uniprot.org/citations/29626158" target="_blank">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

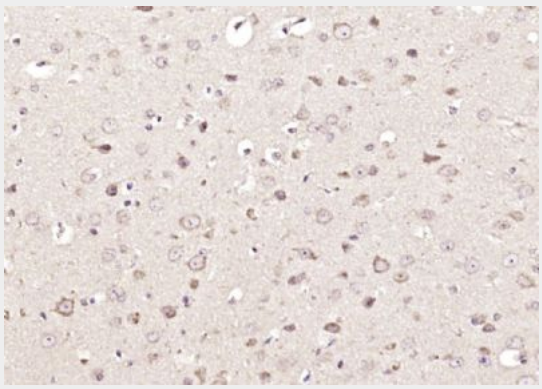
Tissue Location
Widely expressed in embryonic and adult tissues.

USP9X Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

USP9X Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (USP9X) Polyclonal Antibody, Unconjugated (bs-9266R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.