

USP15 Antibody (C-Term)
Peptide-affinity purified goat antibody
Catalog # AF2342a**Specification**

USP15 Antibody (C-Term) - Product Information

Application	IHC, E
Primary Accession	O9Y4E8
Other Accession	NP_006304.1 , 9958
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	112419

USP15 Antibody (C-Term) - Additional Information**Gene ID** 9958**Other Names**

Ubiquitin carboxyl-terminal hydrolase 15, 3.4.19.12, Deubiquitinating enzyme 15, Ubiquitin thioesterase 15, Ubiquitin-specific-processing protease 15, Unph-2, Unph4, USP15, KIAA0529

Dilution

IHC~~1:100~500

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

USP15 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

USP15 Antibody (C-Term) - Protein Information**Name** USP15 {ECO:0000303|PubMed:10444327, ECO:0000312|HGNC:HGNC:12613}**Function**

Hydrolase that removes conjugated ubiquitin from target proteins and regulates various pathways such as the TGF-beta receptor signaling, NF-kappa-B and RNF41/NRDP1-PRKN pathways

(PubMed:16005295, PubMed:17318178, PubMed:19576224, PubMed:19826004, PubMed:21947082, PubMed:22344298, PubMed:24852371). Acts as a key regulator of TGF-beta receptor signaling pathway, but the precise mechanism is still unclear: according to a report, acts by promoting deubiquitination of monoubiquitinated R-SMADs (SMAD1, SMAD2 and/or SMAD3), thereby alleviating inhibition of R-SMADs and promoting activation of TGF-beta target genes (PubMed:21947082). According to another reports, regulates the TGF-beta receptor signaling pathway by mediating deubiquitination and stabilization of TGFBR1, leading to an enhanced TGF-beta signal (PubMed:22344298). Able to mediate deubiquitination of monoubiquitinated substrates, 'Lys-27'-, 'Lys-48'- and 'Lys-63'-linked polyubiquitin chains (PubMed:33093067). May also regulate gene expression and/or DNA repair through the deubiquitination of histone H2B (PubMed:24526689). Acts as an inhibitor of mitophagy by counteracting the action of parkin (PRKN): hydrolyzes cleavage of 'Lys- 48'- and 'Lys-63'-linked polyubiquitin chains attached by parkin on target proteins such as MFN2, thereby reducing parkin's ability to drive mitophagy (PubMed:24852371). Acts as an associated component of COP9 signalosome complex (CSN) and regulates different pathways via this association: regulates NF-kappa-B by mediating deubiquitination of NFKBIA and deubiquitinates substrates bound to VCP (PubMed:16005295, PubMed:17318178, PubMed:19576224, PubMed:19826004). Involved in endosome organization by mediating deubiquitination of SQSTM1: ubiquitinated SQSTM1 forms a molecular bridge that restrains cognate vesicles in the perinuclear region and its deubiquitination releases target vesicles for fast transport into the cell periphery (PubMed:27368102). Acts as a negative regulator of antifungal immunity by mediating 'Lys-27'-linked deubiquitination of CARD9, thereby inactivating CARD9 (PubMed:33093067).

Cellular Location

Cytoplasm. Nucleus. Mitochondrion

Tissue Location

Expressed in skeletal muscle, kidney, heart, placenta, liver, thymus, lung, and ovary, with little or no expression in other tissues

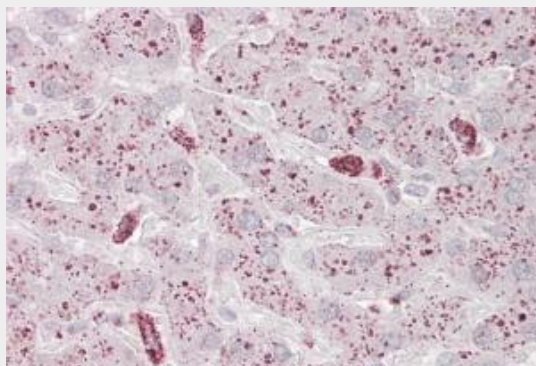
USP15 Antibody (C-Term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

USP15 Antibody (C-Term) - Images



AF2342a (3.8 µg/ml) staining of paraffin embedded Human Liver. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

USP15 Antibody (C-Term) - References

Identification, functional characterization, and chromosomal localization of USP15, a novel human ubiquitin-specific protease related to the UNP oncoprotein, and a systematic nomenclature for human ubiquitin-specific proteases. Baker RT, Wang XW, Woollatt E, White JA, Sutherland GR. Genomics. 1999 Aug 1;59(3):264-74. PMID: 10444327