

USP15 Antibody (C-Terminus)
Goat Polyclonal Antibody
Catalog # ALS14557**Specification**

USP15 Antibody (C-Terminus) - Product Information

Application	IHC
Primary Accession	Q9Y4E8
Reactivity	Human, Rabbit, Hamster, Monkey, Chicken, Horse, Xenopus, Bovine, Dog
Host	Goat
Clonality	Polyclonal
Calculated MW	112kDa KDa

USP15 Antibody (C-Terminus) - 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

Target/Specificity

Human USP15.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

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

USP15 Antibody (C-Terminus) - 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: 21947082, PubMed: 22344298, PubMed: 24852371, PubMed: 16005295, PubMed: 17318178, PubMed: 19826004, PubMed: 19576224). 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:19826004, PubMed:19576224). 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

Volume

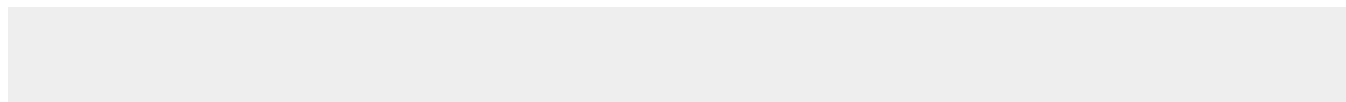
100 µl

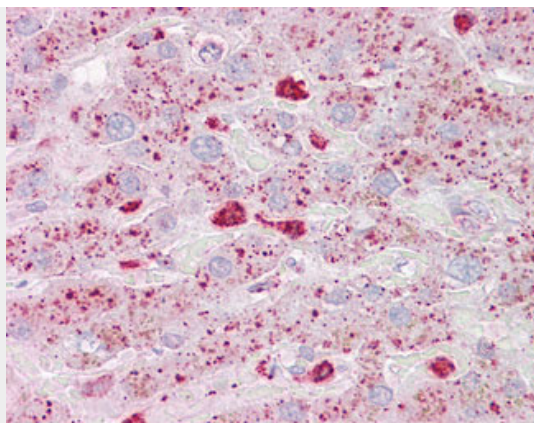
USP15 Antibody (C-Terminus) - Protocols

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-Terminus) - Images





Anti-USP15 antibody IHC of human liver.

USP15 Antibody (C-Terminus) - Background

Hydrolase that removes conjugated ubiquitin from target proteins and regulates various pathways such as the TGF-beta receptor signaling and NF-kappa-B pathways. 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 as well as 'Lys-48'-linked polyubiquitin chains, protecting them against proteasomal degradation. May also regulate gene expression and/or DNA repair through the deubiquitination of histone H2B (PubMed:24526689). 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. Protects APC and human papillomavirus type 16 protein E6 against degradation via the ubiquitin proteasome pathway.

USP15 Antibody (C-Terminus) - References

Kim K.I.,et al.Submitted (NOV-1998) to the EMBL/GenBank/DDBJ databases.
Nagase T.,et al.DNA Res. 5:31-39(1998).
Nakajima D.,et al.DNA Res. 9:99-106(2002).
Kim M.K.,et al.Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).