

Anti-USP15 Antibody
Rabbit polyclonal antibody to USP15
Catalog # AP61008**Specification**

Anti-USP15 Antibody - Product Information

Application	WB
Primary Accession	O9Y4E8
Other Accession	O8R5H1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	112419

Anti-USP15 Antibody - Additional Information**Gene ID** 9958**Other Names**

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

Target/Specificity

Recognizes endogenous levels of USP15 protein.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-USP15 Antibody - 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

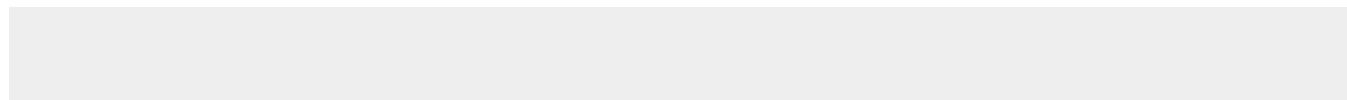
Expressed in skeletal muscle, kidney, heart, placenta, liver, thymus, lung, and ovary, with little or no expression in other tissues

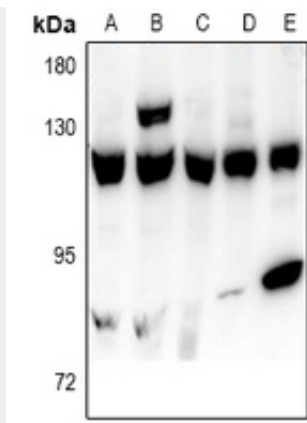
Anti-USP15 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-USP15 Antibody - Images





Western blot analysis of USP15 expression in A549 (A), SKOVCA3 (B), HEK293T (C), H9C2 (D), AML12 (E) whole cell lysates.

Anti-USP15 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human USP15. The exact sequence is proprietary.