

Rabbit USP15 Polyclonal Antibody | anti-USP15 antibody

USP15 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325230	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

USP15; Polyclonal Antibody; USP15 Antibody; Deubiquitinating enzyme 15; Deubiquitinating enzyme; EC 3 1 2 15; KIAA0529; MGC131982; MGC149838; MGC74854; Ubiquitin Carboxy terminal Hydrolase 15; Ubiquitin carboxyl-terminal hydrolase 15; Ubiquitin specific peptidase 15; Ubiquitin specific processing protease 15; Ubiquitin Specific Protease 15; Ubiquitin thioesterase 15; Ubiquitin thiolesterase 15; Ubiquitin-specific-processing protease 15; UBP 15; UBP15; UBP15_HUMAN; Unph 2; UNPH 4; Unph-2; Unph2; Unph4; USP 15; Usp15; anti-USP15 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	USP15 antibody detects endogenous levels of total USP15
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	981
Applicable Applications for anti-USP15 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Nucleus; Mitochondrion
Tissue Specificity	Expressed in skeletal muscle, kidney, heart, placenta, liver, thymus, lung, and ovary, with little or no expression in other tissues.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA325230 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from HeLa cells, using USP15 antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-USP15 antibody

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 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 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).

Subunit Structure: A homodimer structure has been reported; however it is unclear whether the protein form a homodimer in vivo (PubMed:22001210). Identified in a complex with the COP9 signalosome complex (CSN) (PubMed:16005295). Interacts with SMAD1, SMAD2 and SMAD3; the interaction is direct (PubMed:21947082). Forms a complex with SMURF2 and SMAD7 (PubMed:22344298). Interacts with TGFBR1 (PubMed:22344298). Interacts with SART3; the interaction is direct (PubMed:24526689). May interact with RNF20 and RNF40 (PubMed:24526689). May interact with PRKN (PubMed:24852371).

Post-translational Modifications: Phosphorylated. Phosphorylation protects against ubiquitination and subsequent degradation by the proteasome. Ubiquitinated, leading to degradation by the proteasome.

Similarity: Belongs to the peptidase C19 family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	355330276
NCBI GeneID	9958
NCBI Accession #	NP_001239007.1
NCBI GenBank Nucleotide #	NM_001252078.1
UniProt Accession #	Q9Y4E8; Q08AL5; Q9H8G9; Q9HCA6; Q9UNP0; Q9Y5B5
Molecular Weight	Observed: 115 kD Predicted: 113 kDa
NCBI Official Full Name	ubiquitin carboxyl-terminal hydrolase 15 isoform 1
NCBI Official Synonym Full Names	ubiquitin specific peptidase 15
NCBI Official Symbol	USP15

NCBI Official Synonym Symbols	UNPH4; UNPH-2
NCBI Protein Information	ubiquitin carboxyl-terminal hydrolase 15
UniProt Protein Name	Ubiquitin carboxyl-terminal hydrolase 15
UniProt Gene Name	USP15
UniProt Synonym Gene Names	KIAA0529

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/usp15-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/325230>