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USP2 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS11009

Specification

USP2 Antibody (Internal) - Product Information

Application	**IHC**
Primary Accession	O75604
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**68kDa KDa**

USP2 Antibody (Internal) - Additional Information

Gene ID 9099

Other Names
Ubiquitin carboxyl-terminal hydrolase 2, 3.4.19.12, 41 kDa ubiquitin-specific protease, Deubiquitinating enzyme 2, Ubiquitin thioesterase 2, Ubiquitin-specific-processing protease 2, USP2, UBP41

Target/Specificity
Human USP2. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except RC3H2 (42%).

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
USP2 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

USP2 Antibody (Internal) - Protein Information

Name USP2

Synonyms UBP41

Function
Hydrolase that deubiquitinates polyubiquitinated target proteins such as MDM2, MDM4 and CCND1 (PubMed:17290220, PubMed:19917254, PubMed:19838211). Isoform 1 and isoform 4 possess both ubiquitin-specific peptidase and isopeptidase activities (By similarity). Deubiquitinates MDM2 without reversing MDM2-mediated p53/TP53 ubiquitination and thus indirectly promotes p53/TP53 degradation and limits p53 activity (PubMed:17290220, PubMed:<a

href="http://www.uniprot.org/citations/19838211" target="_blank">19838211). Has no deubiquitinase activity against p53/TP53 (PubMed:17290220). Prevents MDM2-mediated degradation of MDM4 (PubMed:17290220). Plays a role in the G1/S cell-cycle progression in normal and cancer cells (PubMed:19917254). Regulates the circadian clock by modulating its intrinsic circadian rhythm and its capacity to respond to external cues (By similarity). Associates with clock proteins and deubiquitinates core clock component PER1 but does not affect its overall stability (By similarity). Regulates the nucleocytoplasmic shuttling and nuclear retention of PER1 and its repressive role on the clock transcription factors CLOCK and BMAL1 (By similarity). Plays a role in the regulation of myogenic differentiation of embryonic muscle cells (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:O88623}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:O88623} Note=Localizes in the spermatid head in late-elongating spermatids in the thin area between the outer acrosomal membrane and the plasma membrane. {ECO:0000250|UniProtKB:Q5U349}

Tissue Location
Expressed in mesangial cells of the kidney and in different types of glomerulonephritides (at protein level)

Volume
50 µl

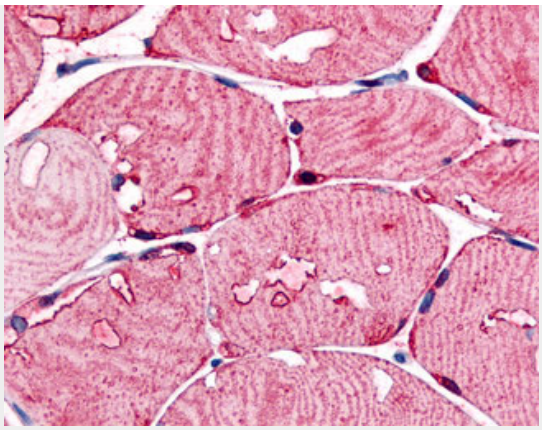
USP2 Antibody (Internal) - Protocols

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

USP2 Antibody (Internal) - Images

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Anti-USP2 antibody ALS11009 IHC of human skeletal muscle.

USP2 Antibody (Internal) - Background

Hydrolase that deubiquitinates polyubiquitinated target proteins such as MDM2, MDM4 and CCND1. Isoform 1 and isoform 4 possess both ubiquitin-specific peptidase and isopeptidase activities. Deubiquitinates MDM2 without reversing MDM2-mediated p53/TP53 ubiquitination and thus indirectly promotes p53/TP53 degradation and limits p53 activity. Has no deubiquitinase activity against p53/TP53. Prevents MDM2-mediated degradation of MDM4. Plays a role in the G1/S cell-cycle progression in normal and cancer cells. Plays a role in the regulation of myogenic differentiation of embryonic muscle cells. Regulates the circadian clock by modulating its intrinsic circadian rhythm and its capacity to respond to external cues. Associates with clock proteins and deubiquitinates core clock component PER1 but does not affect its overall stability. Regulates the nucleocytoplasmic shuttling and nuclear retention of PER1 and its repressive role on the clock transcription factors CLOCK and ARNTL/BMAL1 (By similarity).

USP2 Antibody (Internal) - References

Gong L.,et al.Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.
Rossi S.,et al.Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Taylor T.D.,et al.Nature 440:497-500(2006).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.