

Anti-USP2 Antibody (C-Terminus)

Rabbit Anti Human Polyclonal Antibody Catalog # ALS17621

Product Information

Application IHC-P **Primary Accession** 075604

Predicted Human, Mouse, Rat, Rabbit, Hamster, Monkey, Bovine, Horse, Dog

HostRabbitClonalityPolyclonalCalculated MW68072Concentration (mg/ml)1 mg/ml

Additional Information

Gene ID 9099

Alias Symbol USP2

Other Names USP2, Deubiquitinating enzyme 2, Ubiquitin specific peptidase 2, Ubiquitin

specific protease 9, USP9, Ubiquitin specific protease 12, Ubiquitin specific

protease 2, Ubiquitin thioesterase 2, UBP41

Target/Specificity Human USP2. BLAST analysis of the peptide immunogen showed no

homology with other human proteins.

Reconstitution & Storage Immunoaffinity purified

Precautions Anti-USP2 Antibody (C-Terminus) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name USP2

Synonyms UBP41

Function Hydrolase that deubiquitinates polyubiquitinated target proteins such as

MDM2, MDM4 and CCND1 (PubMed:<u>17290220</u>, PubMed:<u>19838211</u>,

PubMed: 19917254). 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: 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)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.