

Anti-UBP10 antibody



Description Unconjugated Rabbit polyclonal to UBP10

Model STJ191568

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, WB

Gene ID 9100

Gene Symbol <u>USP10</u>

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity UBP10 Polyclonal Antibody detects endogenous levels of protein.

Tissue Specificity Widely expressed.

Purification UBP10 antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Ubiquitin carboxyl-terminal hydrolase 10 Deubiquitinating enzyme 10

Ubiquitin thioesterase 10 Ubiquitin-specific-processing protease 10

Molecular Weight 87 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:12608OMIM:609818</u>

Alternative Names Ubiquitin carboxyl-terminal hydrolase 10 Deubiquitinating enzyme 10

Ubiquitin thioesterase 10 Ubiquitin-specific-processing protease 10

Function Hydrolase that can remove conjugated ubiquitin from target proteins such as

p53/TP53, BECN1, SNX3 and CFTR. Acts as an essential regulator of p53/TP53 stability: in unstressed cells, specifically deubiquitinates p53/TP53 in the cytoplasm, leading to counteract MDM2 action and stabilize p53/TP53. Following DNA damage, translocates to the nucleus and deubiquitinates p53/TP53, leading to regulate the p53/TP53-dependent DNA damage response. Component of a regulatory loop that controls autophagy and p53/TP53 levels: mediates deubiquitination of BECN1, a key regulator of autophagy, leading to stabilize the PIK3C3/VPS34-containing complexes. In turn, PIK3C3/VPS34-containing complexes regulate USP10 stability, suggesting the existence of a regulatory system by which PIK3C3/VPS34-containing complexes regulate p53/TP53 protein levels via USP10 and USP13. Does not deubiquitinate MDM2. Deubiquitinates CFTR in early endosomes, enhancing its endocytic recycling. Involved in a TANK-

dependent negative feedback response to attenuate NF-kappaB activation via deubiquitinating IKBKG or TRAF6 in response to interleukin-1-beta (IL1B)

stimulation or upon DNA damage.

Cellular Localization Cytoplasm Nucleus Early endosome. Cytoplasmic in normal conditions. After

DNA damage, translocates to the nucleus following phosphorylation by ATM

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Post-translational Modifications

Phosphorylated by ATM following DNA damage, leading to stablization and translocation it to the nucleus. Ubiquitinated. Deubiquitinated by USP13.

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