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Ubiquitin Conjugation Factor E4 B Rabbit mAb

Catalog # AP76759

Product Information

Application	WB
Primary Accession	O95155
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	146185

Additional Information

Gene ID	10277
Other Names	UBE4B
Dilution	WB~~1:1000
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	UBE4B (HGNC:12500)
Function	Acts as an E3 ubiquitin ligase and E4 ubiquitin chain elongation enzyme specifically involved in polyubiquitin chain assembly (PubMed:21317885). Plays an essential role in cardiac development and in the protection of neurons from degeneration evoked by ER stress (By similarity). Is recruited to early endosomes via interaction with the ESCRT-0 component HGS, where it ubiquitinates membrane protein cargo such as EGFR and APP to promote their sorting into multivesicular bodies and subsequent lysosomal degradation (PubMed:24344129, PubMed:32841720). Promotes MDM2-mediated polyubiquitination and subsequent degradation of the tumor suppressor TP53 (PubMed:21317885). May regulate myosin assembly in striated muscles together with STUB1 and VCP/p97 by targeting myosin chaperone UNC45B for proteasomal degradation (PubMed:17369820). Mediates the formation of 'Lys-11'- or 'Lys-48'-linked polyubiquitin chains on TRA2A and PYCR2 and induces their degradation by the proteasome (PubMed:35669517). Thereby regulates the alternative splicing function of

	TRA2A (PubMed:35669517). Also regulates the mTOR signaling pathway by polyubiquitinating KLHL22, an E3 ligase that degrades the GATOR1 complex protein DEPDC5 (By similarity). Under mitochondrial depolarization, mediates the ubiquitination of NIPSNAP1, thereby promoting its interaction with autophagy receptors NDP52 and p62/SQSTM1 and its subsequent degradation via the lysosome-dependent pathway (PubMed:41596759).
Cellular Location	Early endosome. Cytoplasm Nucleus {ECO:0000250|UniProtKB:Q9ES00}
Tissue Location	Expressed in differentiated myotubes (at protein level) (PubMed:17369820). Highest expression in ovary, testis, heart and skeletal muscle (PubMed:11802788). Expression is low in colon, thymus and peripheral blood leukocytes (PubMed:11802788). Almost undetectable in lung and spleen (PubMed:11802788)

Background

Ubiquitin-protein ligase that probably functions as an E3 ligase in conjunction with specific E1 and E2 ligases (By similarity).

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