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FBXW8 Rabbit pAb

Catalog # AP98204

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8N3Y1
Other Accession	Q8N3Y1
Reactivity	Rat
Predicted	Pig, Human, Mouse, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67394
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FBXW8/FBXO29
Epitope Specificity	181-280/598
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 F-box domain. Contains 5 WD repeats.
SUBUNIT	Part of a SCF-like complex consisting of CUL7, RBX1, SKP1, FBXW8 and GLMN isoform 1. Interacts with CUL7.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	FBXO29, also designated F-box/WD repeat-containing protein 8 (FBXW8), is a 598 amino acid protein that contains one 40 amino acid F-box region, making it a member of the F-box family. FBXO29 also contains five WD repeats. F-box proteins are critical components of the SCF (Skp1-CUL-1-F-box protein) type E3 ubiquitin ligase complex and are involved in substrate recognition and recruitment for ubiquitination. F-box proteins are members of a large family that regulates cell cycle, immune response, signaling cascades and developmental programs by targeting proteins, such as cyclins, cyclin-dependent kinase inhibitors, IkB- □and ∫-catenin, for degradation by the proteasome after ubiquitination. Functioning as a component of the SCF complex, FBXO29 is thought to recognize and bind to select phosphorylated proteins, thereby promoting their ubiquitination and subsequent degradation. FBXO29 exists as two isoforms as a result of alternative splicing events.

Additional Information

Gene ID	26259
Other Names	FBW6; FBW8; FBX29; FBXO29; FBXW6; FBXW8_HUMAN; FBXW8; F-box and WD-40 domain-containing protein 8; F-box only protein 29; F-box and WD repeat domain containing 8; F-box and WD-40 domain protein 8
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	FBXW8 {ECO:0000303|PubMed:17205132, ECO:0000312|HGNC:HGNC:13597}
Function	Substrate-recognition component of the Cul7-RING(FBXW8) ubiquitin ligase complex, which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:17205132, PubMed:18498745, PubMed:21572988, PubMed:24362026, PubMed:35982156). The Cul7-RING(FBXW8) complex mediates ubiquitination and consequent degradation of GORASP1, acting as a component of the ubiquitin ligase pathway that regulates Golgi morphogenesis and dendrite patterning in brain (PubMed:21572988). Mediates ubiquitination and degradation of IRS1 in a mTOR-dependent manner: the Cul7-RING(FBXW8) complex recognizes and binds IRS1 previously phosphorylated by S6 kinase (RPS6KB1 or RPS6KB2) (PubMed:18498745). The Cul7-RING(FBXW8) complex also mediates ubiquitination of MAP4K1/HPK1: recognizes and binds autophosphorylated MAP4K1/HPK1, leading to its degradation, thereby affecting cell proliferation and differentiation (PubMed:24362026). The Cul7-RING(FBXW8) complex also mediates ubiquitination of phosphorylated cyclin-D1 (CCND1) (PubMed:17205132). The Cul7-RING(FBXW8) complex is however not a major regulator of CCND1 stability during the G1/S transition (By similarity). Associated component of the 3M complex, suggesting that it mediates some of 3M complex functions (PubMed:24793695).
Cellular Location	Cytoplasm, perinuclear region. Golgi apparatus. Cytoplasm Note=Localizes to the cytosol when phosphorylated at Ser-85, promoting IRS1 ubiquitination. {ECO:0000250|UniProtKB:Q8BIA4}

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