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Fbxw7 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI11220

Product Information

Application	WB, IHC
Primary Accession	Q8VBV4
Other Accession	NM_080428, NP_536353
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Horse, Bovine
Predicted	Human, Mouse, Rabbit, Zebrafish, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79848

Additional Information

Gene ID	50754
Alias Symbol	1110001A17Rik, AGO, Cdc4, Fbw7, Fbwd6, Fbx30, Fbxo30, Fbxw6, SEL-10
Other Names	F-box/WD repeat-containing protein 7, F-box and WD-40 domain-containing protein 7 {ECO:0000312|MGI:MGI:1354695}, F-box protein FBW7, F-box protein Fbxw6, F-box-WD40 repeat protein 6, SEL-10, Fbxw7 {ECO:0000312|MGI:MGI:1354695}
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Fbxw7 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Fbxw7 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Fbxw7 {ECO:0000312|MGI:MGI:1354695}
Function	Substrate recognition component of a SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:21953459, PubMed:22748924). Recognizes and binds phosphorylated sites/phosphodegrons within target proteins and thereafter brings them to the SCF complex for ubiquitination (PubMed:22748924). Mediates ubiquitination and subsequent degradation of CCNE1 and MYC (PubMed:22748924). Identified substrates include cyclin-E (CCNE1 or CCNE2),

DISC1, JUN, MYC, NOTCH1 released notch intracellular domain (NICD), NOTCH2, MCL1, MLST8, RICTOR and probably PSEN1 (By similarity). Acts as a negative regulator of JNK signaling by binding to phosphorylated JUN and promoting its ubiquitination and subsequent degradation (By similarity). SCF(FBXW7) complex mediates the ubiquitination and subsequent degradation of NFE2L1 (PubMed:21953459). Involved in bone homeostasis and negative regulation of osteoclast differentiation (PubMed:29149593). Regulates the amplitude of the cyclic expression of hepatic core clock genes and genes involved in lipid and glucose metabolism via ubiquitination and proteasomal degradation of their transcriptional repressor NR1D1; CDK1-dependent phosphorylation of NR1D1 is necessary for SCF(FBXW7)-mediated ubiquitination (PubMed:27238018). Also able to promote 'Lys-63'-linked ubiquitination in response to DNA damage (By similarity). The SCF(FBXW7) complex facilitates double-strand break repair following phosphorylation by ATM: phosphorylation promotes localization to sites of double-strand breaks and 'Lys-63'-linked ubiquitination of phosphorylated XRCC4, enhancing DNA non-homologous end joining (By similarity).

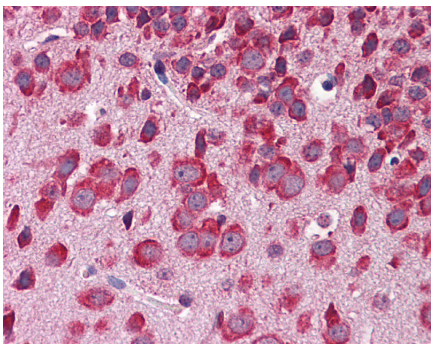
Cellular Location

Nucleus, nucleoplasm. Chromosome {ECO:0000250|UniProtKB:Q969H0}. Note=Localizes to site of double-strand breaks following phosphorylation by ATM {ECO:0000250|UniProtKB:Q969H0}

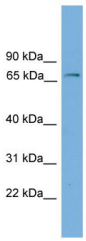
Tissue Location

Widely expressed with highest levels in brain, heart and testis.

Images



Mouse Brain



WB Suggested Anti-Fbxw7 Antibody Titration: 0.2-1 µg/ml
Positive Control: Mouse Lung

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