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# Fbxw7 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI11220

## Product Information

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|---|---|
| **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

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| **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

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|---|---|
| **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).

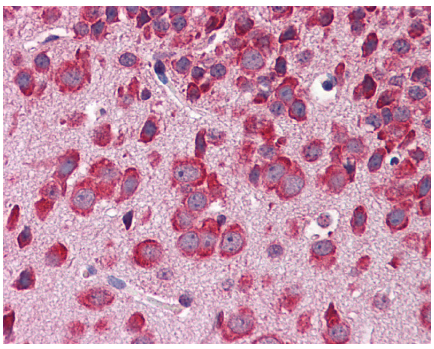
**Cellular Location**

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

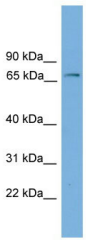
**Tissue Location**

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