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Product datasheet for MC219910

Fbxw7 (NM_080428) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fbxw7 (NM_080428) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Fbxw7
Synonyms:	1110001A17Rik; AGO; Cdc4; Fbw7; Fbwd6; Fbx30; Fbxo30; Fbxw6; SEL-10
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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Fully Sequenced ORF:

>MC219910 representing NM_080428
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGTGTGTGCGTCCCGAGCAGCGTTCTGGTTCTGAGCTGCGTCTGCTGGTGCTGGGGAGTTTTGCTGC
CGGTTCCGCTGCCTAATCTTCCTTTTCTGGCGTGCCTGAGCATGTCCACGTTAGAATCTGTGACATACCT
ACCTGAAAAGGGGTTATATTGTCAGAGACTGCCAAGCAGCCGGACACACGGGGGCACAGAATCCCTGAAG
GGGAAAAATACAGAAAATATGGGTTTCTACGGCACATTAAAAATGATTTTTTACAAAATGAAAAGAAAGT
TGGACCATGGTTCTGAAGTTCGTTCCTTTTCTTTGGGAAAGAAACCATGCAAAGTCTCAGATTATACCAG
TACCACTGGCCTTGTACCATGTTCAGCAACACCAACAACTTTTGGGGACCTGAGAGCAGCCAATGGGCAA
GGGCAGCAGCGGCGGAGGATTACATCTGTCCAACCACCCACAGGCCTTCAAGAGTGGCTGAAAATGTTTC
AGAGCTGGAGCGGACCAGAGAAGTTGCTGGCTTTAGATGAGCTCATTGACAGCTGTGAACCAACACAAGT
GAAGCATATGATGCAAGTGATAGAGCCCCAGTTCCAGCGAGACTTCATCTCCTTGCTTCCTAAAGAGTTG
GCACTCTATGTGCTTTCATTCCTGGAACCCAAAGACCTGCTGCAAGCGGCTCAGACTTGTCGATACTGGA
GAATTTTGGCTGAGGATAACCTTCTCTGGAGAGAGAAATGTAAAGAAGAGGGGATTGATGAACCGTTGCA
CATCAAGAGAAGAAAAATAATAAAACCAGGTTTCATACACAGCCCATGGAAGAGTGCGTATATCAGACAG
CACAGAATTGATACAAACTGGAGACGAGGAGAACTCAAATCTCCTAAGGTGCTGAAAGGGCATGATGACC
ATGTGATCACATGCCTACAGTTTTGTGGCAACCGCATAGTTAGTGGTTCTGATGACAACACTTTAAAAGT
TTGGTCAGCGGTCACGGGCAAGTGTCTGAGAACGTTAGTGGGACATACAGGTGGAGTGTGGTCATCACAG
ATGAGAGACAATATCATCATCAGTGGATCGACTGACCGGACTCTCAAAGTGTGGAATGCTGAAACTGGAG
AGTGTATACATACTTTATATGGGCACACTTCTACTGTACGGTGTATGCATCTCCATGAAAAAAGGGTTGT
AAGCGGTTCTCGAGATGCCACTCTCAGGGTTTGGGATATTGAGACCGGCCAGTGTTTACACGTCCTGATG
GGTCACGTAGCAGCGGTCCGCTGCGTTCAGTATGATGGCAGGAGGGTTGTTAGTGGAGCTTATGATTTTA
TGGTGAAGGTGTGGGATCCAGAGACTGAGACCTGTCTACACACGTTACAGGGACACACTAATAGAGTCTA
TTCATTACAGTTTGATGGCATCCATGTGGTGAGTGGATCTCTTGATACATCAATCCGAGTCTGGGATGTG
GAGACAGGGAATTGTATTCACACGCTAACAGGACACCAGTCATTAACGAGTGGAATGGAACTCAAAGACA
ATATTCTTGTCTCTGGGAATGCAGATTCTACAGTTAAGATCTGGGATATCAAAACAGGACAGTGTTTACA
AACTTTGCAAGGTCCCAGCAAGCATCAGAGCGCTGTGACCTGCTTACAGTTCAACAAGAACTTCGTAATT
ACCAGCTCAGACGACGGAACGGTCAAACTCTGGGACTTGAAAACGGGTGAATTTATCCGAAACCTCGTCA
CATTGGAGAGTGGGGGGAGCGGGGGAGTTGTGTGGCGGATCAGGGCCTCAAACACAAAGCTGGTGTGTGC
AGTCGGGAGTCGGAATGGAACTGAGGAAACCAAGCTCCTGGTGCTGGACTTTGATGTGGACATGAAATGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_080428

Insert Size: 1890 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_080428.3, NP_536353.2
RefSeq Size:	3728 bp
RefSeq ORF:	1890 bp
Locus ID:	50754
UniProt ID:	Q8VBV4
Cytogenetics:	3 37.7 cM
Gene Summary:	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 bring 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 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).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (3) lacks a few of 5' exons, but has an alternate 5' exon including coding region, as compared to variant 1. The resulting isoform (2) is shorter and has a different N-terminus, as compared to isoform 1.