

Product datasheet for **MR206738**

Fbxl2 (NM_178624) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fbxl2 (NM_178624) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fbxl2
Synonyms:	2810423A21Rik; Fbl3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR206738 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTTTTCTCAAACAGTGATGATGGCCTTATCAACAAGAAGCTACCCAAGGAGCTCCTCTTGAGAATAT
 TCTCCTTCTTGACATCGTAACTCTATGCCGATGTGCACAGATCTCCAAGCCTGGAACATCTTAGCCCT
 GGATGGCAGCAACTGGCAACGGGTGGATCTTTTTAACTCCAGACAGATGTAGAGGGCCGAGTGGTGGAA
 AACATCTCCAAGAGGTGCGGTGGCTTCTTAGAAAGCTCAGCCTGCGTGGCTGCATCGGAGTCGGGGACT
 CCTCTTTGAAGACCTTTGCACAGAACTGCCGGAACATTGAACATTTAAACCTCAATGGCTGCACGAAAT
 CACTGACAGCACGTGTTACAGCCTTAGCAGATTCTGTTCCAAGCTGAAACACCTGGATCTCACGCTCTGC
 GTGTCTGTACCAACAGCTCTTTAAAGGGCATCAGCGAGGGCTGCCGGAACCTGGAATATCTGAACCTCT
 CCTGGTGTGACCAGATCACAAGGAAGGCATTGAGGCGCTGGTGGGGGTGCCGGGTTTGAAGCCCT
 GCTCCTGAGGGTTGTACACAGTTAGAGGACGAAGCTCTGAAACACATTCAGAACCCTGCCACGAGCTG
 GTGAGCCTCAACCTGCAGTCCTGCTCACGCATCACTGATGATGGCGTGGTGCAGATCTGCAGGGGTGCC
 ACCGGCTACAGGCTCTGTGCCTCTCGGGTTGTAGCAACCTTACGGATGCATCTCTCACAGCCTTGGGCT
 GAACTGCCCCAGACTACAAGTTTTGGAGGCTGCCCGGTGCTCCACTCTGACCCGACGAGGCTTTACTCTG
 CTAGCTCGGAATTGCCATGAGCTGGAGAAGATGGACCTTGAAGAATGTGTCTGATTACCGACAGCACCC
 TCGTCCAGCTCTCCATCCACTGTCCAAGCTGCAAGCCCTGAGCTTGTCCCACTGTGAGCTCATCACAGA
 TGAGGGGATCTGCACCTGAGCAGCAGCACCTGTGGGCACGAGAGACTCCGGGTGCTGGAGCTGGACAAC
 TGCTTCTTGTACGGACGCCTCGCTGGAGCACCTGGAGAAGCTGCCGAGGCTGGAGCGACTGGAGCTTT
 ACGACTGCCAGCAGGTACCCCGTGCAGGCATCAAGCGCATGCGGGCTCAGCTTCCATGTCAAAGTCCA
 TGCTACTTTGCTCCAGTCACCCCTCCACCAGCAGTGGCAGGAAGTGGACATCGACTGTGCAGATGCTGT
 GCATACTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR206738 protein sequence
 Red=Cloning site Green=Tags(s)

MVFSNSDDGLINKKLPKELLRIFSFLLDIVTLRCRAQISKAWNILALDGSNWQRVDL FNFQTDVEGRVVE
 NISKRCGGFLRKLSLRGIGVGDSSLKTF AQNCRNIEHLNLNGCTKITDSTCYSLSRFCSKLRKHLDTSC
 VSVTNSSLKGI SEGCRNLEYLNL SWCDQITKEGIEAL VRGCRGLKALLRGCTQLEDEALKHIQNHCHL
 VSLNLQSCSRITDDGVVQICRGCHRLQALCLSGCSNLTDA SLTALGLNCPRLQVLEAARCSHLTDAGFTL
 LARNCHELEKMDLEEVLITDSTLVQLSIHCPKLQALSLSHCELITDEGILHLSSSTCGHERLRVLELDN
 CLLVTDASLEHLENCRLERLELYDCQQVTRAGIKRMRAQLPHVKVHAYFAPVTPPPAVAGSGHRLCRCC
 VIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_178624

ORF Size: 1272 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_178624.6](#), [NP_848739.1](#)
RefSeq Size: 3203 bp

RefSeq ORF: 1272 bp

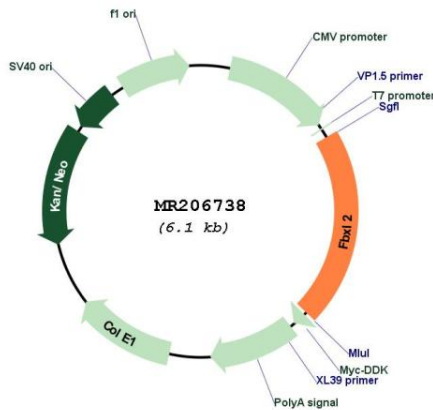
Locus ID: 72179

UniProt ID: [Q8BH16](#)
Cytogenetics: 9 F3

MW: 46.9 kDa

Gene Summary: Calcium-activated substrate recognition component of the SCF (SKP1-cullin-F-box protein) E3 ubiquitin-protein ligase complex, SCF(FBXL2), which mediates the ubiquitination and subsequent proteasomal degradation of target proteins. Unlike many F-box proteins, FBXL2 does not seem to target phosphodegron within its substrates but rather calmodulin-binding motifs and is thereby antagonized by calmodulin. This is the case for the cyclins CCND2 and CCND3 which polyubiquitination and subsequent degradation are inhibited by calmodulin. Through CCND2 and CCND3 degradation induces cell-cycle arrest in G(0). SCF(FBXL2) also mediates PIK3R2 ubiquitination and proteasomal degradation thereby regulating phosphatidylinositol 3-kinase signaling and autophagy (By similarity). PCYT1A monoubiquitination by SCF(FBXL2) and subsequent degradation regulates synthesis of phosphatidylcholine, which is utilized for formation of membranes and of pulmonary surfactant (PubMed:21343341).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206738