

## Product datasheet for **MR206949**

### **Fbxo9 (NM\_023605) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Fbxo9 (NM_023605) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fbxo9
Synonyms:	9030401P18Rik; AA986398
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR206949 representing NM\_023605  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGCAGAAGCGGAGGAAGATTGTCATTCTGATGCTGACAGAGTAGGCGATGAAGGAAATGAGAGTCCGG  
 CTGAGAGAGACCTGCAGGCGCAGCTCCAGATGTTTCAGAGCTCAGTGGATGTTTGAAGTACCCAGGTGT  
 AGGCTCCAGTCATGGAGAACTCGGCCCTTGCAGAGCAGGAAGAAGCTCTATGCTGAAAGCAGCTGCAGAC  
 ACCAAAGGACGACAGGAAGTGGCAAAGGAAGAAAGGCTCGAGAAGTCTTCTGCAGGCAGTGGAGGAAG  
 AACAAAATGGAGCTCTCTATGAAGCCATCAAGTTCTACCGTAGGGCGATGCAGCTGGTCCAGACATTGA  
 GTTCAAGTCACTTACACCCGGTCTCCAGACGGCAGCGCGTGGGAGCGGCTACATCGAAGAGAACGAG  
 GACGCCAGCAAGATGGCCGATCTCTGTCGACTTCCAGCAGCAGCTCACGTTGCAGGAGTCTGTGCTCA  
 AACTCTGTGAGCCTGAGCTTGCAGACAGTCACTCACATATCAGTCTGCCTATGGAGGTGCTGATGTA  
 CATCTTCCGATGGTGGTATCAAGTGACTTGGACCTCAGATCGTTAGAGCAGTTGCTACTGGTGTGCAGA  
 GGATTCTATATCTGTGCCAGAGACCTGAAATCTGGCGTCTGGCTTGCTTGAAAGTGGGGCAGAAAGCT  
 GCATGAAGCTCGTTCATACGCGTCTGGAGAGAGATGTTTCTAGAACGGCCCCGAGTTCGGTTTGTAGG  
 AGTGTACATCAGTAAAACCACGTATATTCGCCAGGGAGAGCAGTCACTTGATGGTTTCTACAGGGCGTGG  
 CACCAAGTGGAAATATTACAGATACATGAGATTCTTTCCTGATGGCCATGTGATGATGTTAACCCCCCG  
 AGGAGCCTCCGTCATCGTTCGCCGTTAAGAACCAGGAACACGAGAACGGATGCAATTCTGCTGGGTCA  
 TTACCGCTTGTACAAGATGCAGACAATCAGACCAAAGTCTTGTCTGTAATAACTAAGAAAAAAGAA  
 AAGCCACTTGACCATAAATACAGGTATTTTCGTCGTGTTCTGTCCAAGAGGCAGATCACAGCTTCCATG  
 TGGGACTGCAGCTGTGCTCCAGTGGCCACCAGAGTTCAACAAACTCATCTGGATCCACCCTCTGTCA  
 CATCACTTACAAAGCAACTGGTGAGACTGCAGTGAAGTGTCTTTGAGATTGACAAGATGTACACGCCCTG  
 TTGTTCCGACAGTGTGAGGAGCTACACTGCCTTCTCGGAAAGCCCTCTG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR206949 representing NM\_023605  
 Red=Cloning site Green=Tags(s)

MAEAEEDCHSDADRVGDEGNESPAERDLQAQLQMFRAQWMFELTPGVGSSHGETRPCRAGRSSMLKAAAD  
 TKGRQELAKEEKARELFLQAVEEEQNGALYEAIKFYRRAMQLVPDIEFKITYTRSPDGDGVGSGYIEENE  
 DASKMADLLSYFQQQLTLQESVLKLCQPELETSQTHISVLPMEVLMYIFRWVSSDLDLRSLEQLSLVCR  
 GFYICARDPEIWRLAACKVWGRSCMKLVPIYASWREMFLEPRVRFDGVIYSKTTYIRQGEQSLDGFYRAW  
 HQVEYYRYMRFPPDGHVMMMLTPEEPPSIVPRLRTRNRTDAILLGHYRLSQDADNQTKVFAVITKKKEE  
 KPLDHYRYFRVVPVQEAHDSFHVGLQLCSSGHQRFNKLWIWHHSCHITYKATGETAVSAFEIDKMYTPL  
 LFARVRSYTAFSERPL

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9044\\_g06.zip](https://cdn.origene.com/chromatograms/mm9044_g06.zip)

**Restriction Sites:**

Sgfl-RsrII

**Cloning Scheme:**


**ACCN:** NM\_023605

**ORF Size:** 1308 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\\_023605.2](#), [NP\\_076094.2](#)

**RefSeq Size:** 2172 bp

**RefSeq ORF:** 1311 bp

**Locus ID:** 71538

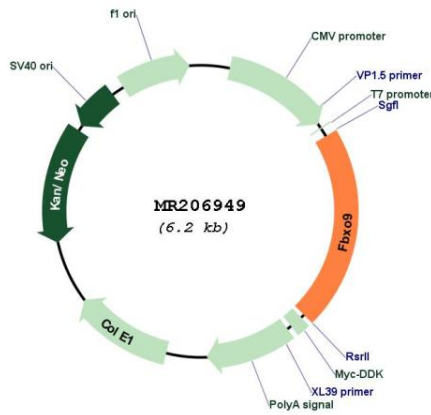
**UniProt ID:** [Q8BK06](#)

**Cytogenetics:** 9 E1

**MW:** 51.1 kDa

**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 TTI1 and TELO2 in a CK2-dependent manner, thereby directly regulating mTOR signaling. SCF(FBXO9) recognizes and binds mTORC1-bound TTI1 and TELO2 when they are phosphorylated by CK2 following growth factor deprivation, leading to their degradation. In contrast, the SCF(FBXO9) does not mediate ubiquitination of TTI1 and TELO2 when they are part of the mTORC2 complex. As a consequence, mTORC1 is inactivated to restrain cell growth and protein translation, while mTORC2 is activated due to the relief of feedback inhibition by mTORC1 (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR206949