

## Product datasheet for **MR207373**

### **Fgd2 (BC021845) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Fgd2 (BC021845) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fgd2
Synonyms:	Tcd-2; Tcd2; tcs-2; tcs2; ZFYVE4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR207373 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTACAGCGAGTACGTGAAGAAGTTTGTAGCGGGCCGCGAACTGCTGGCCACGTGGATGGACAAGTCTC  
 AGCCCTCCAGGAGGTGTCACCCGCATCCAGTGCAGCGAGGCCTCCAGCAGCCTGACCCTGCAGACCA  
 CATGTTGGAGCCTGTGCAAAGAATCCCGCGGTACGAACTGCTGCTCAAGGAATATGTGCAGAAGCTGCCA  
 GCCCAGGCCCCAGACCTCGAAGATGCCAGAGAGCACTGGACATGATCTTCTCAGCTGCACAGCACTCCA  
 ATGCAGCCATTGCAGAGATGGAGCGGCTGCAGGCCTGTGGGATGTGTACCAGCGCCTGGCTTGGAGGA  
 TGACATCGTGGACCCCTCAACACCCCTGCTCCGAGAGGGCCCTGTTCTCAAGATCTCTTCCGCCGAGC  
 GACCCAATGGAACGCTACCTGGTTTTGTTCAACAACATGCTTCTGTATTGTGTACCCCGAGTCTCCAAG  
 TGGGTGCCAGTCCAGGTGCGGACTCGCATCGATGTGGCCGGCATGAAGGTGCGGGAGCTGACCGATGC  
 TGAGTTCCACACTCCTTCTGGTGTCCGAAAGCAGCGCACACTGGAGCTGCAGGCCCGGTCCCGAGAT  
 GAAATGGTTTCTGGATGCAGGCCTGCCAGGCAGCCATTGACCAGGTTGAGAAGCGGAGTGAGACCTTCA  
 AGGCTGCTGTCCAGGGACCTCAGGGGGACAGCAGGAGCCCAAGCCACAGGTAGAGGAGCTGGGTCTCCG  
 AGCGCCTCAGTGGGTCCGGGACAAGATGGTGACCATGTGCATGCGCTGCCAGGAGCCCTTCAATGCCCTG  
 ACTCGTCGGCGCCACCACTGCCGGGCTTCCGGCTATGTAGTGTGTGCCAAGTGTCTGACTACCGTCCGG  
 AGCTGAAATATGACAGCAACAGGCCCAACCGAGTCTGCCTGACCTGTACACATTTCTACTGGAACGT  
 ACTCCCTCAAGGCAAGGAGGACAAGAGGGGGGCATCTTGAGAAAGAGGCCTCAGCAGCACCCGAGCAG  
 AGTCTGGTGTGCAGCTTCTGCAGCTCATAGGAGACAAGTGCAGCAGGAGCCTTCCCGGAGTTGGTGTG  
 TGATCCCCCGGGATGACCCCTTGTCTGTATGTCTATGCAGCCCCCAGGACACAAAGGCTCACACCTC  
 CATCCCCCTACTGGGCTATCAGGTGATTTCAAGGCCCCAGGGGGACCCCTCGGGTTTTCCAGCTGCAACAG  
 TCAGGCCAGCAGTACACCTTCAAGGCCGAGTCTGTGGAGCTGCAGGGCCGCTGGGTGACAGCTATCAAG  
 GTGCGGCCAGTGCCGGACCCCTGAGGGACCTGACGAAGAAGATGTGTCTGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR207373 protein sequence  
 Red=Cloning site Green=Tags(s)

MYSEYVKNFERAAELLATWMDKSQPFQEVVTRIQSEASSSLTLQHMLEPVQRIPRYELLLKEYVQKLP  
 AQAPDLEDAQRALDMIFSAAQHSNAAIAEMERLQGLWDVYQRLGLEDDIVDPSNTLLREGPVLKISFRRS  
 DPMERYLVLFNNMLLYCVPVRLQVGAQFQVRTRIDVAGMKVREL TDAEFPHSFLVSGKQRTLELQARSRD  
 EMYSWMQACQAAIDQVEKRSETFKAHVQFPQGDTEPKPQVEELGLRAPQWVRDKMVTMCMRCQEPFNAL  
 TRRRHRCRACGYVVC AKCSYRAELKYDSNRPNRVCLTCYFTLTGNVLPQGKEDKRRGILEKEASAAPEQ  
 SLVCSFLQLIGDKCSRSLPRSWCVIPRDDPLVLYYAAPQDTKAHTSIPLLLGYQVISGPQGDPRVFQLQQ  
 SGQQYTFKAESVELQGRWVTAIKRAASGRTPEGPDEEDVSD

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** BC021845

**ORF Size:** 1383 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:** [BC021845](#), [AAH21845](#)

**RefSeq Size:** 2094 bp

**RefSeq ORF:** 1385 bp

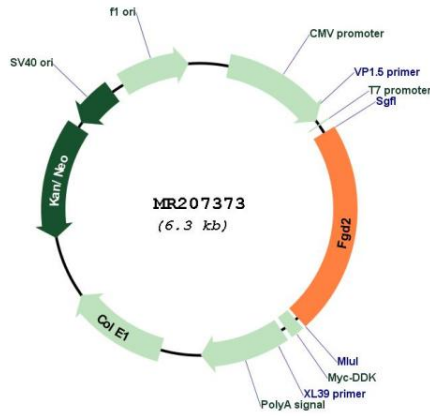
**Locus ID:** 26382

**Cytogenetics:** 17 A3.3

**MW:** 52.5 kDa

**Gene Summary:** Activates CDC42, a member of the Ras-like family of Rho- and Rac proteins, by exchanging bound GDP for free GTP. Activates JNK1 via CDC42 but not RAC1. Binds to phosphatidylinositol 4,5-bisphosphate, phosphatidylinositol 3,4,5-trisphosphate, phosphatidylinositol 5-monophosphate, phosphatidylinositol 4-monophosphate and phosphatidylinositol 3-monophosphate.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR207373