

Product datasheet for **MR216700**

Fgd2 (NM_001159538) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fgd2 (NM_001159538) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fgd2
Synonyms:	Tcd-2; Tcd2; tcs-2; tcs2; ZFYVE4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>MR216700 representing NM_001159538
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCGAGCCTGTGAGAAGCAGGACTCAGTGTGCAACCTGGTGGCTGTGTTTGAGAACAACAGCAGGA
CTCCGGGAGAAGCACCTGGATCCCATAGCCTTGAGGACCAGCCCATAGCCCTGAACACCAGCTGTCCCT
GTCCCCAGAGCCTTGGGAGGCACCCCTGTCAAGGAGGCCTTGAAGTCTGAATTCGGCCAGTGAGCAGG
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GCCCGGGCCAGAGACACAGGAACCTGAGGAGAAGAGGGTCGTGCGAGAGCTTCTGGAGACGGAGCAGGC
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AGTTCTTCTTCCCGAGCTGCAGCGCGCTGGATGACTGGGCAGCCACGCCCGCATTGGGGATGTGAT
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CTGGCCACGTGGATGGACAAGTCTCAGCCCTCCAGGAGGTGGTACCCGCATCCAGTGCAGCGAGGCCCT
CCAGCAGCCTGACCTGCAGCACCATGTTGGAGCCTGTGCAAAGAATCCCGCGGTACGAACTGCTGCT
CAAGGAATATGTGAGAAGCTGCCAGCCAGGCCCCAGACCTCGAAGATGCCAGAGAGCACTGGACATG
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AGGAGCCTTCCCGGAGCTGGTGTGTGATCCCCGGGATGACCCCTTGTCTGTATGTCTATGCAGCCC
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GGCCGCTGGGTGACAGCTATCAAGCGTGCAGCCAGTGGCCGACCCTGAGGGACCTGACGAAGAAGATG
TGTCTGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR216700 representing NM_001159538
 Red=Cloning site Green=Tags(s)

MERACEKQDSVCNLVAVFENNSRTPGEAPGSHSLEDQPHSPEHQLSL SPEPWEAPPVKEALKSEFRPVSR
 TYLSSLKNKLSSGAWRRSCQPGVSPGPETQEPEEKRVVRELLETEQAYVARLHLLDQVFFQELLREAGRS
 KAFPEDVVKLIFSNISSIYRFHAQFFLELQRRVDDWAATPRIGDVIQKLAPFLKMYSEYVKNFERAAEL
 LATWMDKSQPFQEVVTRIQCEASSSLTLQHHMLEPVQRIPTYELLLKEYVQKLP AQAPDLEDAQRALDM
 IFSAAQHSNAAIAEMERLQGLWDVYQRLGLEDDIVDPSNTLLREGPVLKISFRRSDPMERYLVLFNNMLL
 YCVPRVLQVGAQFQVRTRIDVAGMKVRELTDAEFPHSFLVSGKQRTLELQARSDEMVSWMQACQAAIDQ
 VEKRSETFKA AVQGPQGDTEPKPQVEELGLRAPQWRDKMVTMCMRCQEPFNALTRRRHHCRACGYVVC
 AKCSDYRAELKYDSNRPNRVCLTCYFTLTGNVLPQGKEDKRRGILEKEASAAPEQSLVCSFLQLIGDKCS
 RSLPRSWCVIPRDDPLVLYVYAAPQDTKAHTSIPLLLGYQVISGPQGDPRVFQLQSQGQYTFKAESVELQ
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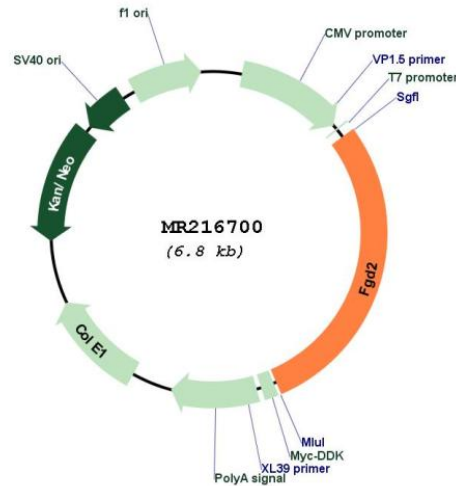
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001159538

ORF Size: 1968 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_001159538.1](#), [NP_001153010.1](#)

RefSeq Size: 2634 bp

RefSeq ORF: 1971 bp

Locus ID: 26382

UniProt ID: [Q8BY35](#)

Cytogenetics: 17 A3.3

MW: 75.2 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]