

Product datasheet for **MC221459**

Fgd4 (NM_139232) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	Fgd4
Synonyms:	9030023J02Rik; 9330209B17Rik; Fr; Frabp; ZFYVE; ZFYVE6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



Fully Sequenced ORF:

>MC221459 representing NM_139232
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGGAGTCTAATCCGCCCCCTACTTCTGTACCTCAAAGGGAAGCATAGTAAGGTATCGGATCTCA
 TCAGCCACTTTGAAGGAGGCAGTGTCTTGTCAAGTTACATTGATTTGCAGAAAGATTCTACTATGAACCT
 CAATATTTCTCAAACCTCTAGGACAGCCTGGGTTAACCTCCTCACCTCCACGAAAATTTCTGCCCCAGCAC
 TCTCCACAGAAGCAGGAAAACGACCAGATCAGACTCAGGGGCAACATGGTTGTTTGCCCAATGGTGTAG
 TGGCTGCACAAAACCAGATGGAATGTGAAGATGAGAAGGAGACTACTCTTAGCCAGAGATGGCTATTCA
 GACTGCTGCCGCCCTCTCCTGATACACATGTGCTGAATGGAGAAAGAAATGAAACCATCACAGATTCTGCA
 TCATCCATAGCCAATAGTCATGATGAAAATGCTTCTGACAGCAGCTGCAGGACTCCAGGGACGGACTTAG
 GGCTTCCCTCAAAGAAGGGGAGCCAGGGATGGACGCTGAGCTCCAAGAGGGGAAAATGGGGTGAACAC
 CATGGGATTGGATACGTTGGACCAGCACCATGAAGTGAAGGAGACTAATGAACAGAACTTCACAAAATA
 GCCACTGAACTTTTACTTACAGAAAGAGCTTATGTCAGCCGGCTCGACCTCCTAGATCAGGTATTTTATT
 GCAAATATTAGAAGAAGCAAACCGAGGCTCATTTCTGACAGATGGTGAATAAAATCTTTTCTAACAT
 TTATCAATAAATGCCTTCCATAGTAAATTCCTATTACCTGAGCTGGAGAAACGAATGCAAGAATGGGAA
 ACTACACCCAGAATTGGAGATATCTGCAAAAGTTGGCGCCATTCTTAAGATGTATGGAGAATACGTGA
 AGGGATTTGATAATGCAGTGGAACTGGTTAAAACCATGACAGAGCGTGTTCCCCAGTTTAAATCAGTGAC
 TGAAGAGATTGAGAAACAGAAGATCTGTGGAAGCTTAACGCTGCAGCATCACATGCTGGAGCCTATTAG
 CGCATTCCTCGCTATGAGATGCTCCTGAAGGACTACCTGAAGAAGTTGTCTCCTGACTCCCCAGACTGGA
 ATGATGCAAAAAGTCACTTGAAATATATCTACAGCAGCAAGCCATTCTAATAGTGAATAAGAAAAAT
 GGAGAACCTGAAGAACTTTTGAATAATGAGATGTTGGGAGAGAAGAGGATATTGTAATCCCTCA
 AATGAATAATAAAGAGGACAAATCCTCAAATAGCAGCTCGGAACACATCAGCACAAGAGCGCTACC
 TCTTCTATTCAACAACATGTTGCTATATTGTGTGCCAGATTGAGCTTGGTTGGCTCAAAATTCACAGT
 TCGAACCCAGAGTTGGCATTGATGGAATGAAATTTGTGGAGACTCACAATGAAGAATATCCACACTTTC
 CAGATATCTGGGAAAGAAAGAACCTGGAGCTGCAGGCCAGTTCTGAACAAGCAAGGAAGAATGGATCA
 AGGCCCTTCAAGAAAGTATTGATGCTTTTCATCAAAGGCATGAACTTTTCAAGAAATGCAATCGCAAAGGA
 AAATGACATTCCCCTAGAAGTTTCTACTGCTGAGCTGGGAAAACGAGCTCCAAGATGGATACGTGATAAT
 GAAGTGACCATGTGTATGAAGTGCAAAGAGTCTTCAATGCACTGACCAGAAGCGGCATCACTGCCGGG
 CATGTGGACATGTGGTTTGTGGAAATGTTCTGACTACAAAGCTCAGCTTGAGTATGATGGTGGAAGATT
 GAACAAGGTTTGTAAAGACTGTTACCAGATAATAAGTGGATTACAGACAGTGAAGAAAAGAAAAGAGG
 GGCATTTTAGAGATTGAATCAGCAGAAGTATCAGGAAATAGTGAGGTGTGCAGTTTCTTTCAGTACATGG
 AAAAGTCAAAGCCTTGGCAGAAAATCTGGTGTGTGATCCCCAAGCAAGACCCCTTGTGCTGTACATGTA
 TGGCGCTCCTCAGGATGTCAGAGCCCAAGCGACCATACCCCTCCTGGGCTACGTTGTGGATGATATGCCT
 AAGAGTGACAGATCTGCCACATAGTTTCAAGCTGACCCAGTCCAAGTCTGTGCATAGCTTTGTGCAGACA
 ATGAGGAACTGAAACAGAAATGGTGAAAATCATCCTTCTAGCTGTACAGGTGAGACACCAGATGGCCC
 AAGTGAGCATCTAGCCACCTTGAACAATCTCCCTGGACCAAGAAAAGTCAGATGCTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_139232

Insert Size:

2301 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_139232.3 , NP_631978.1
RefSeq Size:	8344 bp
RefSeq ORF:	2301 bp
Locus ID:	224014
UniProt ID:	Q9IZT5
Cytogenetics:	16 A2- A3
Gene Summary:	This gene is a member of the FYVE, RhoGEF and PH domain containing (FGD) family. The encoded protein is a Cdc42-specific guanine nucleotide exchange factor (GEF) that plays an essential role in regulating the actin cytoskeleton and cell morphology. Disruption of the gene in mouse causes abnormal nerve development and dysmyelination. Mutations in a similar gene in human can cause Charcot-Marie-Tooth disease type 4H (CMT4H), a disorder of the peripheral nervous system. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2014] Transcript Variant: This variant (alpha) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at a downstream in-frame start codon, compared to variant 1. It represents use of an alternate promoter. The resulting isoform (alpha) has a shorter N-terminus, compared to isoform 1. Variants alpha and 2 encode the same isoform (alpha).