

## Product datasheet for **MC219567**

### **Fgd4 (NM\_139233) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Fgd4 (NM_139233) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Fgd4
Synonyms:	9030023J02Rik; 9330209B17Rik; Frabp; ZFYVE6
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC219567 representing NM\_139233  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGGAGTCTAATCCGGCCCCTACTTCTGTACCTCAAAGGGAAGCATAAGTAAAGTATCGGATCTCA  
 TCAGCCACTTTGAAGGAGGCAGTGTTCCTCAAGTTACATTGATTTGCAGAAAGATTCTACTATGAACCT  
 CAATATTCCTCAAACCTAGGACAGCCTGGGTTAACTCCTCACCTCCACGAAAAATTTCTGCCCCAGCAC  
 TCTCCACAGAAGCAGGAAAAACGACCCAGATCAGACTCAGGGGCAACATGGTTGTTTGCCCAATGGTGTAG  
 TGGCTGCACAAAACCAGATGGAATGTGAAGATGAGAAGGAGACTACTCTTAGCCAGAGATGGCTATTCA  
 GACTGCTGCCCTCCTGATACACATGTGCTGAATGGAGAAAGAAATGAAACCATCACAGATTCTGCA  
 TCATCCATAGCCAATAGTCATGATGAAAATGCTTCTGACAGCAGCTGCAGGACTCCAGGGACGGACTTAG  
 GGCTTCCCTCAAAGAAGGGGAGCCAGGATGGACGCTGAGCTCCAAGAGAGGGAAAAATGGGGTGAACAC  
 CATGGGATTGGATACGTTGGACCAGCACCATGAAGTGAAGGAGACTAATGAACAGAACTTCACAAAATA  
 GCCACTGAACTTTTACTTACAGAAAGAGCTTATGTCAGCCGGCTCGACCTCCTAGATCAGGTATTTTATT  
 GCAAACCTATTAGAAGAAGCAAACCGAGGCTCATTTCCTGCAGAGATGGTGAATAAAATCTTTTCTAACAT  
 TTCATCAATAAATGCCTTCCATAGTAAATTCCTATTACCTGAGCTGGAGAAACGAATGCAAGAATGGGAA  
 ACTACACCAGAATTGGAGATATCCTGCAAAAGTTGGCGCCATTCCTTAAGATGTATGGAGAATACGTGA  
 AGGGATTTGATAATGCAGTGGAACTGGTAAAACCATGACAGAGCGTGTCCCCAGTTTAAATCAGTGAC  
 TGAAGAGATTGAGAAACAGAAGATCTGTGGAAGCTAACGCTGCAGCATCACATGCTGGAGCCTATTCAG  
 CGCATTCTCGCTATGAGATGCTCCTGAAGGACTACCTGAAGAAGTTGTCTCCTGACTCCCAGACTGGA  
 ATGATGCAAAAAAGTCACTTGAATTTATCTACAGCAGCAAGCCATTCTAATAGTGAATAAGAAAAAT  
 GGAGAACCTGAAGAACTTTTAGAAATTTATGAGATGTTGGGAGAAGAAGAGGATATTGTAATCCCTCA  
 AATGAACTAATAAAGAAGGACAATCCTCAAACCTAGCAGCTCGGAACACATCAGCACAAGAGCGCTACC  
 TCTTCTTATTCAACAACATGTTGCTATATTGTGTGCCAGATTACGTTGGTTGGCTCAAAATTCACAGT  
 TCGAACCAGAGTTGGCATTGATGGAATGAAAATTTGTGGAGACTCACAATGAAGAATATCCACACACTTTC  
 CAGATATCTGGGAAAGAAAGAACCTGGAGCTGCAGGCCAGTTCTGAACAAGACAAGGAAGAATGGATCA  
 AGGCCCTTCAAGAAAGTATTGATGCTTTTCATCAAAGGCATGAACTTTCAGAAATGCAATCGCAAAGGA  
 AAATGACATTCCTAGAAAGTTTCTACTGCTGAGCTGGGAAAACGAGCTCCAAGATGGATACGTGATAAT  
 GAAGTGACCATGTGTATGAAGTCAAGAGTCTTCAATGCACTGACCAGAAGGGCGCATCACTGCCGGG  
 CATGTGGACATGTAAGTGAGGCATCCTCATTATCACAGCTGTTAGAAATGGTATATAGG**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_139233
- Insert Size:** 1812 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.

**RefSeq:** [NM\\_139233.2](#), [NP\\_631979.1](#)

**RefSeq Size:** 2216 bp

**RefSeq ORF:** 1812 bp

**Locus ID:** 224014

**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]