

Product datasheet for **MR211315**

Fgd1 (NM_008001) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Fgd1 (NM_008001) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Fgd1 |
| Synonyms: | ZFYVE; ZFYVE3 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>MR211315 representing NM_008001
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCATGGCCACCGAGTCCCGGGGGCCCTGGGCCTTCGGATCCCGAACGCTCAGCGGCAATACCCCCG
 GTGCCGCTCCGCTGGCCTGTGCCGACTCGGACCTGGAGCCTTGAACCCGGGCTGCCGGTGAGCAGGGG
 CTCAGGCACGGCTCTTGAGGCCCTTTGGATCCTCAGTTTGTGGACCCTCGGATGCCAGCCTGGGAGCG
 CCTCCAAGCTCCCGGTCTTACCCTGCGGCCCTAGTCCTCAGCACCACCGGGCCCTGCGCTTCTCTACC
 ACCTGGAGGGCTCGCAGCCTCGGCTGGACTGCACCAGGAAACCGGATCCTGGTTAAAAGTTTGTCCCT
 TGACCCTGGCCAGAGCCTTGAGCCTCATCCAGAAGGTCCCAACGGCTTCGCTCAGATCCAGGCCCTCCC
 ACTGAAATCCCTGGCCACGTCTTACCCTGAAGCGGGCACCGGGCCAAAGCCACAGGTTCCCCCAA
 AGCCAGTACCTGCAGATGCCCGGGTCTTCTCTCTGAGCCATTCTCCACCACCATCACGCC
 TCTGCCTGCAGACCCTAGAGTGGCAAGGACTCGTCCCAGAGCTGAGGCCAGCACTAGTTCTGCAGCA
 GTATCATATTGATTGAGAAGTTTGAAGAGAGCCTGTGATTGTTGCCTCGGATAGGCCAGCCCCCTGGCC
 CCTGCCAGTTCCCCCAGAGCCAGCCATGTTGCCACAGCCACCCCGCAGCCAACAGGGTCCCAGCTCCC
 TGAGGGTGAAGCTTCTCGCTGCCTGTTCTGCTGGCTCCTGGGCCCGGGATGGTGAAGGTGCCTAAC
 CGGGACAGCGCATTGACAGCATCAGCTCGCCATCCAACAGTGAAGAGACCTGCTTCGTAGTGATGATG
 GGCCCCCATCCACAGCCTCTGTCTGGGCCCGCCCTGGCTAGTAGCCAGTAGCTTTGGCCGACCC
 CCACCGGCTGGTCCCAGGAGTTGACAGTGACCTGGAAGAGGAAGAGGAAGAAGAGGAGGAAAAAG
 GAAAGATAAATCCAGTCCCCCGATGGAGAGACAGGAGTCTGTGGAGCTGACTGTGCAGCAGAAGGTGT
 TCCATATTGCCAATGAGCTCTGCAAACTGAGAAGGCCATGTTTCCAGGCTCCATCTCTGGATCAGGT
 ATTCTGTGCCCGCTGCTGGAAGAAGCTCGGAACCGCAGTTCTTCCCCGAGATGTTGTCCACGGCATC
 TTCTCTAACATCTGCTCCATCTATTGCTTCCACCAGCAGTTCTGCTGCCTGAGCTAGAGAAGCGCATGG
 AGGAATGGGACCGCTACCCACGCATTGGTGACATTCTCAGAAGTTGGCACCCCTTCTCAAGATGTATGG
 CGAGTATGTAAAAAATTCGACCGGGCGGTAGAGCTGGTCAACACATGGACAGAGCGGTCTACCCAGTTT
 AAAGTCATCATCCATGAAGTACAGAAGGAGGAAGCCTGTGGCAACCTGACCTGCAGCACCACATGCTGG
 AGCCCGTGCAGCGTATCCCCGCTATGAACTTCTTCTCAAGGACTATCTGTTAAAGTGCCTCATGGCTC
 CCCGGACAGCAAGGATGCCAGAAGTCTTTGGAGCTGATAGCCACAGCAGCAGAACACTTAATGCTGCC
 ATCCGGAAAAATGGAACGAATGCACAAGTCTGTAAGGTGTATGAGCTGCTAGGGGTGAGGAGGACATTG
 TCAGTCCCACAAAGAGCTCATAAAGGAAGGCCATATCCTTAAGCTGTCAGCAAAGAATGGGACCACTCA
 AGATCGATACCTCATATTATTCAACGACCGCCTCTTTACTGCGTGCCAGGCTGCGGCTCCTTGGTCAG
 AAGTTTAGCGTGCGGGCACGCATTGATGTAGATGGCATGGAGCTAAAGGAGAGCTCCAACCTCAACATGC
 CTCGGACCTTCTGGTGTGAGGAAAGCAGCGCTCTCTGAACTGCAGGCCAGGACTGAGGAGGAGAAGAA
 AGACTGGGTCCAGGCCATCAATTCACCCTCCTGAAGCATGAACAGACCTGGAGACTTTCAAACTGTTG
 AACTCAACAAACAGGGATGATGAAGATACTCCCCTAACTCTCCAACCTGGATCTTGGGAAGAGGGCAC
 CTACGCCATCCGGGAAAAGGAAGTACCATGTGCATGCGCTGCCAGGAGCCCTCAATTCATCACCAA
 ACGCAGGCACCACTGCAAGGCCCTGTGGCATGTGGTTTGTGGAAATGCTCTGAGTCCGAGCCCGACTC
 ATCTATGACAACAATCGTTCCAACCGTGTGTGCACTGATTGCTATGTGGCCTGCATGGAGCACCTGGGA
 GCAGTCCAGCCTGTAGCCAGCATACACCCAGCGCAGGAGGTCCATCCTAGAGAAACAGGCCTCGGTGCG
 TGCTGAGAACAGCGTCATCTGCAGCTTCTGCACTACATGGAGAAGGGTGGGAAAGGATGGCACAAGGCA
 TGGTTTGTGGTCTGAGAATGAACCTTGGTGTGTACATCTATGGAGCCCTCAGGATGTGAAAGCCC
 AGCGCAGCCTGCCCTCATTGGCTTTGAGGTGGGGCTCCTGAGGAGGAGAGCGCCAGACAGGAGGCA
 TGTCTTCAAGATCACAAAAGCCACCTAAGCTGGTACTTACGCCAGAGACAGAAGAACTCCAGCGGCGC
 TGGATGGCTGTTCTCGGACGGCGGGCCGTGGGACACATTCTGCCAGGGCCACACTGTCTGAGGACA
 AGGAGATGGAGGAGACACAGTGGCAGCCTCAGGAGCCACTGCTGAACCTCCTGAAGCCTCCAGACCCG
 AGACAAGACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR211315 representing NM_008001
 Red=Cloning site Green=Tags(s)

```
MHGHRVPGGPGSPERSAANTPGAAPLACADSDPGALEPGLPVSRSGTALGGPLDPQFVGPSDASLGA
PPSSRVLPCGSPQHHRALRFSYHLEGSQPRPGLHQGNRILVKSLSLDPGQSLEPHPEGPQRLRSDPGPP
TEIPGPRPSPLKRAPGPKQVPPKPSYLMQPRVLPPEPIPPPPSRPLPADPRVAKGLVPRAEASTSSAA
VSSLIEKFEREPVIVASDRPAPGCPVPPPEAMLQPPPPQPTGSQLPEGEASRCLFLLAPGPRDGEKVPN
RDSGIDSISSPSNSEETCFVSDDGPPIHSLCPGPPALASMPVALADPHRPGSQEVDSDLEEEEEEEEEEEK
EREIPVPMERQESVELTVQQKVFHIANELLQTEKAYVSRHLHLLDQVFCARLLEEARNRSSFADVVHGI
FSNICSIYCFHQQLLPELEKRMEEWDYPRIGDILQKLAPFLKMYGEYVKNFDRAVELVNTWTERSTQF
KVIIEHVQKEEACGNLTLQHMLEPVQRIIPRYELLLKDYLLKLPHGSPDSKDAQSLELIATAAEHSNAA
IRKMERMHKLLKVVYELLGGEEDIVSPTKELIKEGHILKLSAKNGTTQDRYLILFNDRLLYCVPRLRLGQ
KFSVRARIDVDGMELKESNLNMPRTFLVSGKQRSLELQARTEEEKKDWQAINSTLLKHEQTLETFKLL
NSTNRDDETPPNSPNVDL GKRAPTP IREKEVTMCMRCQEPFNSITKRRHHCKACGHVVCCKCSEFRARL
IYDNNRSNRVCTDCYVALHGAGSSPACSQHTPQRRRSILEKQASVAAENSVICSF LHYMEKGGKGWHKA
WFVVPENEPLVLYIYGAPQDVKAQRSLPLIGFEVGPPEAGERPDRRHVFKITQSHLSWYFSPETEELQRR
WMAVLGRAGRGDTFCPGPTLSEDKEMEETPVAASGATAEPPEASQTRDKT
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9048_d01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



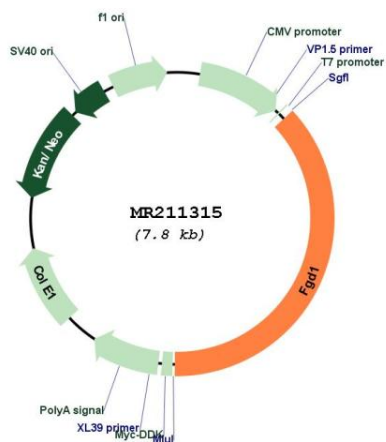
* The last codon before the Stop codon of the ORF

ACCN: NM_008001

ORF Size: 2880 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: | <ol style="list-style-type: none">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_008001.4 , NP_032027.2 |
| RefSeq Size: | 3516 bp |
| RefSeq ORF: | 2883 bp |
| Locus ID: | 14163 |
| UniProt ID: | P52734 |
| Cytogenetics: | X 68.46 cM |
| MW: | 106.8 kDa |
| Gene Summary: | This gene encodes a member of family of Rho-specific guanine nucleotide exchange factors. Rho-specific guanine nucleotide exchange factors catalyze the exchange of GDP for GTP and activate small GTPases, which function as molecular switches in signaling. This protein specifically binds cell division cycle 42, a Rho (Ras homology) GTPase. Investigations in mouse suggest that this protein is important for skeletal mineralization and for regulating the actin cytoskeleton. In humans, mutations in this gene are associated with faciogenital dysplasia, also known as Aarskog-Scott syndrome. [provided by RefSeq, Mar 2014] |

Product images:



Circular map for MR211315