

Product datasheet for **RC239421**

FGD3 (NM_001286993) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGD3 (NM_001286993) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FGD3
Synonyms:	ZFYVE5
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC239421 representing NM_001286993
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAGTCAGGCAGGGGGTCTCAACCCCTCCAGGACCCATTGCTGCCCTAGGGATGCCAGACACTGGGC
 CTGGCAGTTCCTCCCTAGGGAAGCTTCAGGCGCTCCCTGTTGGGCCAGAGCCCACTGTGGGACCCCTGT
 CAGCCTGGCTGCAGCAGGGGACGGCTCTCCAGACATAGGCCCCACGGGAGAGCTGAGTGGTAGCTTAAAG
 ATCCCCAACCGGGACAGCGGGATCGACAGTCCCTCCTCCAGTGTGGCTGGAGAGAACTTTCCCTGCGAGG
 AGGGCTTGGAGGCTGGCCCAAGCCCACTGTACTGGGGCGCACGCAGAGATGGCCCTGGACAGCCAGGT
 CCCGAAGGTACCCCCAGGAGGAGGGACAGCGACGTGGGTGAGGAACCTGACTCTGAGAACACCCCC
 CAGAAGGTGACAAGGATGCCGGCTGGCCAGCACTCTGGCCCCAGAAGCTTCTCCACATTGCCCAGG
 AGCTCTGCACACCGAGGAGACCTATGTGAAGCGGCTGCACCTGTGGACCAGGTTTTCTGCACCAGGCT
 GACGGATGCGGGGATCCCTCCAGAAGTCATCATGGGCATATTCTCTAACATCTCCTCCATCCACCGCTTC
 CACGGGCAGTTCCTGCTGCCGGAGCTGAAGACCGGGATCACGGAGGAGTGGGACACAAACCCACGGCTCG
 GGGACATCCTGCAGAAGCTGGCCCCATTCTGAAGATGTACGGCGAGTATGTCAAGAACTTTGACCGAGC
 CGTAGGGCTGGTGAACAGTGGACCCAGCGCTCCCACTGTTAAAGACGTGTCACAGCATCCAGAAG
 CAGGAGGTATGCGGGAACCTGACGCTGCAGCACCACATGCTGGAGCCCGTGCAGAGGGTCCCCCGGTACG
 AGCTGTGCTCAAGGACTATCTGAAGAGGCTCCCGCAGGACGCCCCAGACCGGAAGGATGCGGAGAGGTC
 CTTGGAGTCACTCCACAGCCCAACCACTCCAATGCTGCCATTGGAAAAGTGGAGAAAATGCACAAG
 CTCTTGGAGGTGTACGAGCAGCTGGGTGGGAAGAAGACATTGTCAACCCGGCCAATGAAGTATCAAGG
 AGGGCCAAATCCAGAACTGTACGCCAAGAAGCGCACCCCCAGGACCCCACTTCTGTTCAACAG
 CATGATCCTTTACTGTGTGCCAAAGCTGCGGCTCATGGGCCAGAAGTTCAGCGTCCGGGAGAAGATGGAC
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 CATCGAGAAGCACAACAGAACAGCGAAACCTTCAAGGCTTTTGGTGGCGCCTTCAGCCAGGATGAGGAC
 CCCAGCCTCTCTCAGACATGCCTATCACGAGCACCAGCCCTGTGGAGCCTGTGGTGACCACCGAAGGCA
 GTTCGGGTGCAGCAGGGCTCGAGCCAGAAAATATCCTCTAAGACCAGACGTGACAAGGAGAAGCAGAG
 CTGTAAGAGCTGTGGTGAGACCTTCAACTCCATCACCAAGAGGAGGCATCACTGCAAGCTGTGTGGGGCG
 GTCATCTGTGGGAAGTGTCCGAGTTCAAGGCCGAGAACAGCCGGCAGAGCCGTGTCTGCAGAGATTGTT
 TCCTGACACAGCCAGTGGCCCTGAGAGCACAGAGACCCCACTGCAGACCCCCAGCCAGCCTGCTCTG
 CGGCCCTCTGCGGCTGTGAGAGCGGTGAGACCTGGAGCGAGGTGTGGGCGCCATCCCCATGTCAGAT
 CCCCAGGTGCTGCACCTGCAGGGAGGCAGCCAGGACGGCCGGCTGCCCGCACCATCCCTCTCCCCAGCT
 GCAAACCTGAGTGTGCCGACCTGAGGAGAGGCTGGACTCGGGGCATGTGTGGAAGCTGCAGTGGGCCAA
 GCAGTCTGGTACCTGAGCGCCTCTCCGAGAGCTGCAGCAGCAGTGGCTGGAACCCCTAAGCACTGCT
 GCCCATGGGGACACGGCCAGGACAGCCCGGGGGCCCTGCAGTTCAGGTCCTATGGGCGCAGCTGCTC
 CG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239421 representing NM_001286993
 Red=Cloning site Green=Tags(s)

MESGRGSSTPPGPIAALGMPDTGPGSSSLGKLQALVGPRAHCGDPVSLAAAGDGGSPDIGPTGELSGSLK
 IPNRDSGIDSPSSSVAGENFPCEEGLEAGPSPTVLGAHAEMALDSQVPKVTPQEEADSDVGEEDSENTP
 QKADKDALAQHSGPQKLLHIAQELLHTEETYVKRLHLLDQVFCRTLTDAGIPPEVIMGIFSNISSIHRF
 HGQFLLPELKTRITTEWDTNPRLDILQKLAPFLKMYGEYVKNFDRAVGLVSTWTQRSPLFKDQVHSHIQK
 QEVCGNLTQHHMLEPVQQRVPRYELLLKDYLRKLPQDAPDRKDAERSLELI STAANHSNAAIRKVEKMHK
 LLEVYEQLGGEEDIVNPANELIKEGQIQKLSAKNGTPQDRHLFLFNSMILYCVPKLRLMGQKFSVREKMD
 ISGLQVQDIVKPNTAHTFIITGRKRSLELQTRTEEEKKEWIIQIIQATIEKHKQNSETFKAFGGAFSQDED
 PSLSPDMPITSTSPVEPVVTTTEGSSGAAGLEPRKLSKTRRDKKQSCKSCGETFNSITKRRHHCKLCGA
 VICGKCEFKAENSRQSRVCRDCF LTQPVAPETETPTADPQPSLLCGPLRLSESGETWSEVWAAIPMSD
 PQVLHLQGGSDGRLPRTIPLPCKLSVPDPEERLDSGHVWKLQWAKQSWYLSASSAELQQWLETLSTA
 AHGDTAQDSPGALQLQVPMGAAAP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

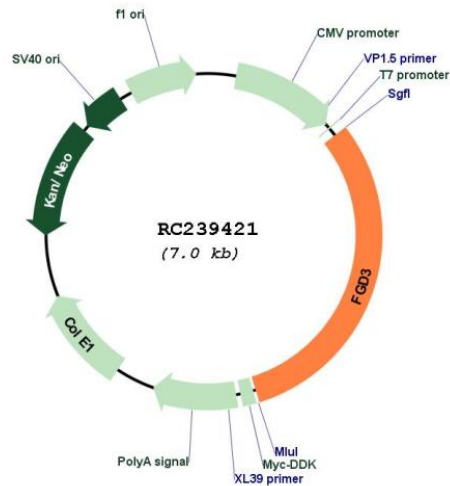
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001286993

ORF Size: 2172 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_001286993.1](#), [NP_001273922.1](#)

RefSeq Size: 3449 bp

RefSeq ORF: 2175 bp

Locus ID: 89846

UniProt ID:	<u>Q5JSP0</u>
Cytogenetics:	9q22.31
Protein Pathways:	Regulation of actin cytoskeleton
MW:	79.7 kDa
Gene Summary:	Promotes the formation of filopodia. May activate CDC42, a member of the Ras-like family of Rho- and Rac proteins, by exchanging bound GDP for free GTP. Plays a role in regulating the actin cytoskeleton and cell shape (By similarity).[UniProtKB/Swiss-Prot Function]