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Product datasheet for RC212649

FGD3 (NM_001083536) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGD3 (NM_001083536) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FGD3
Synonyms:	ZFYVE5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC212649 representing NM_001083536
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGTCAGGCAGGGGGTCCTCAACCCCTCCAGGACCCATTGCTGCCCTAGGGATGCCAGACACTGGGC
CTGGCAGTTCCTCCCTAGGGAAGCTTCAGGCGCTCCCTGTTGGGCCCAGAGCCCACTGTGGGGACCCTGT
CAGCCTGGCTGCAGCAGGGGACGGCTCTCCAGACATAGGCCCCACGGGAGAGCTGAGTGGTAGCTTAAAG
ATCCCCAACCGGGACAGCGGGATCGACAGTCCCTCCTCCAGTGTGGCTGGAGAGAACTTTCCCTGCGAGG
AGGGCTTGGAGGCTGGCCCAAGCCCCACTGTACTGGGGGCGCACGCAGAGATGGCCCTGGACAGCCAGGT
CCCGAAGGTCACCCCCCAGGAGGAGGCGGACAGCGACGTGGGTGAGGAACCTGACTCTGAGAACACCCCC
CAGAAGGCTGACAAGGATGCCGGCCTGGCCCAGCACTCTGGCCCCCAGAAGCTTCTCCACATTGCCCAGG
AGCTCCTGCACACCGAGGAGACCTATGTGAAGCGGCTGCACCTGCTGGACCAGGTTTTCTGCACCAGGCT
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CACGGGCAGTTCCTGCTGCCGGAGCTGAAGACGCGGATCACGGAGGAGTGGGACACAAACCCACGGCTCG
GGGACATCCTGCAGAAGCTGGCCCCATTCCTGAAGATGTACGGCGAGTATGTCAAGAACTTTGACCGAGC
CGTAGGGCTGGTGAGCACGTGGACCCAGCGCTCCCCACTGTTTAAAGACGTCGTCCACAGCATCCAGAAG
CAGGAGGTATGCGGGAACCTGACGCTGCAGCACCACATGCTGGAGCCCGTGCAGAGGGTCCCCCGGTACG
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CTCTTGGAGGTGTACGAGCAGCTGGGTGGGGAAGAAGACATTGTCAACCCGGCCAATGAACTGATCAAGG
AGGGCCAAATCCAGAAACTGTCAGCCAAGAACGGCACCCCCCAGGACCGCCACCTCTTCCTGTTCAACAG
CATGATCCTTTACTGTGTGCCCAAGCTGCGGCTCATGGGCCAGAAGTTCAGCGTCCGGGAGAAGATGGAC
ATCTCAGGCCTCCAGGTGCAGGATATCGTCAAGCCAAACACAGCACATACATTCATCATAACAGGAAGAA
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CTGTAAGAGCTGTGGTGAGACCTTCAACTCCATCACCAAGAGGAGGCATCACTGCAAGCTGTGTGGGGCG
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GATCCCCAGGTGCTGCACCTGCAGGGAGGCAGCCAGGACGGCCGGCTGCCCCGCACCATCCCTCTCCCCA
GCTGCAAACTGAGTGTGCCGGACCCTGAGGAGAGGCTGGACTCGGGGCATGTGTGGAAGCTGCAGTGGGC
CAAGCAGTCCTGGTACCTGAGCGCCTCCTCCGCAGAGCTGCAGCAGCAGTGGCTGGAAACCCTAAGCACT
GCTGCCCATGGGGACACGGCCCAGGACAGCCCGGGGGCCCTGCAGCTTCAGGTCCCTATGGGCGCAGCTG
CTCCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212649 representing NM_001083536
Red=Cloning site Green=Tags(s)

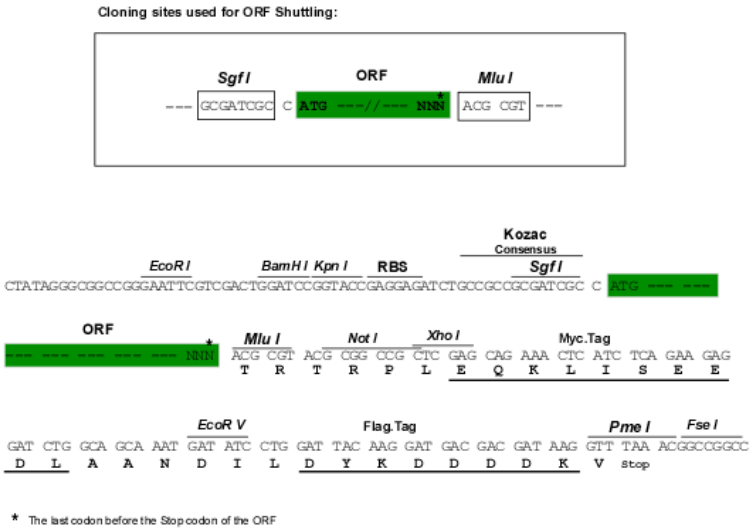
MESGRGSSTPPGPIAALGMPDTGPGSSSLGKLQALPVGPRAHCGDPVSLAAAGDGSPDIGPTGELSGSLK
IPNRDSGIDSPSSSVAGENFPCEEGLEAGPSPTVLGAHAEMALDSQVPKVTPQEEADSDVGEEPDSENTP
QKADKDAGLAQHSGPQKLLHIAQELLHTEETYVKRLHLLDQVFCTRLTDAGIPPEVIMGIFSNISSIHRF
HGQFLLPELKTRITEEWDTNPRLGDILQKLAPFLKMYGEYVKNFDRAVGLVSTWTQRSPLFKDVVHSIQK
QEVCGNLTLQHHMLEPVQRVPRYELLLKDYLKRLPQDAPDRKDAERSLELISTAANHSNAAIRKVEKMHK
LLEVYEQLGGEEDIVNPANELIKEGQIQKLSAKNGTPQDRHLFLFNSMILYCVPKLRLMGQKFSVREKMD
ISGLQVQDIVKPNTAHTFIITGRKRSLELQTRTEEEKKEWIQIIQATIEKHKQNSETFKAFGGAFSQDED
PSLSPDMPITSTSPVEPVVTTEGSSGAAGLEPRKLSSKTRRDKEKQSCKSCGETFNSITKRRHHCKLCGA
VICGKCSEFKAENSRQSRVCRDCFLTQPVAPESTEKTPTADPQPSLLCGPLRLSESGETWSEVWAAIPMS
DPQVLHLQGGSQDGRLPRTIPLPSCKLSVPDPEERLDSGHVWKLQWAKQSWYLSASSAELQQQWLETLST
AAHGDTAQDSPGALQLQVPMGAAAP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8101_g07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001083536

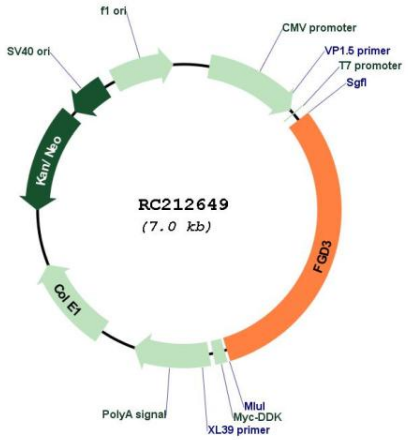
ORF Size: 2175 bp

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

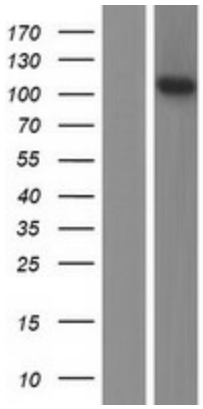
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001083536.2
RefSeq Size:	3470 bp
RefSeq ORF:	2178 bp
Locus ID:	89846
UniProt ID:	Q5JSP0
Cytogenetics:	9q22.31
Protein Pathways:	Regulation of actin cytoskeleton
MW:	79.4 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]

Product images:



Circular map for RC212649



Western blot validation of overexpression lysate (Cat# [LY421216]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212649 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).