

Product datasheet for RC229441

FGD5 (NM_152536) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGD5 (NM_152536) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FGD5
Synonyms:	ZFYVE23
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC229441 representing NM_152536 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTCCAGGGTCCGAAGCCCCATTGCCCCCAAGCCAGGCTGACTGCCCAAACGAGTGGAGAGCCA
GTGTGTACCTGAATGACAGCTTGAACAAATGCAGCAACGGGCGGCTGCCCTGTGTAGACAGGGGCTTGA
TGAGGGGCCCCGGTCCATCCCAAAGTCTCTGAGTCGGAGACCGACGAGGATTACATCGTGGTCCCCAGG
GTTCCGCTGAGGGAGGATGAACCAAGGACGAGGGCAGTGTGGGAACAAAGCCCTGGTGTCTCCCGAGT
CCTCTGCGGAAGAGGAAGAGGAGCGTGAAGAGGGAGGCGAGGCATGTGGCCTGGAGGGTACAGGAGCTGG
TGAGGATTCAGTGGCCCCCTGCTGCTCCGGTGCAGGAGCGCTGAGCAGGGAGGGTGAAGAACGACAGAC
CTTGCTCTTGAGGATGAAGGGGAGGGCTGCGCTGATGAGCCAGGGACACTGGAGCAGGTGTCCAGAAGTG
AGGAGGAAGAGAAGCTAGTGCAGCCACACAGGGAGTGCAGCCTGGAGGACAGTGGGCCTTGGGCTGGAGA
GGGGTCTTCCAGAGCGACCTCCTCCTGCCTCACATCCATGGAGAGGACCAGGAGCCCCCGACACCCCC
GGGAGGCAGAGGAGGATGATGAGGAAGGCTGTGCCAGCACAGACCCAGCAGGGGAGATGAGGGTTCGG
GTCCTGACAGGCCACGGAGGACATGGGACAGGATGCTGAGGACACCAGTGAAGGACCCCTGAGAAGGA
GAGGCCACGGGTGTACAGGTGGGAACAGGTTGACCTCAGTGAACCACCTGACCAGGAGAAAGAAACCA
ACCAAGAAGTGGCAGCCGCCACCTGGAGGACCATGCACAGGATGAGTCCGCCGAGGAGAGCTGCCAGAT
TGTCCTTTTGAATGACTGCATGGAGGACTTCTGACTTCCCTCACAGGAAGCCCTATGAGTCTTTC
CCAAGTGAAGCACCTCTTTTGCAGCGAGAGCTGTTCTCCTTCTTGAATCAGCGAAAGGTTTAGAAT
CAGAGCAGGCACCAAAGCTGGGGCTGCGTGCAGGAGGAGAACCCCATGGTGGGGCTTTGTGTGGCCAGTG
TGGCTCCCTACAGGGTGGAGCGGCCGAGGGTCCCGCAGCCCTGATGTGGTGGTCTGCTGGAGGAGGAG
GCCTTGGATGATGACTGGCCAACCCCTATGTGATGGGAGTGGCCTGCCGGTCAAGCGCCCTGGAG
AAGGAGGGCAGGCTGCATCGGACGCCCTGGTGGTTATGGCTCGAAGAAGAATTGAACTGTGAGGCAGA
GGTGGCTGGTCCCGCGGACAGGAAGAACACCAGCAGGAGGTCGGGCCCACTCTGGGAAGGTGGCC



[View online »](#)

GGCTATGTCCCAGAAACCGTCCCTGAAGAAACCGACCTGAGGCGGGCTCGTCAGCCCCTGGCATTGGAG
GTGCCGACAGAGGAGTGGGAAAGACGCTTTTGTTCATTGGAGGGGAAGCCCTTGAAGCCAGCAGGGCCTT
GCCAGCAAAGCCCAGGGCCTTTACTTTATACCTCGGTGTTCTCCGTGGAAGGCCGAGAGATTCCAGTG
TCCGTGTACCAGGAGCCTGAGGGGTGAGGTTGGATGACCACAGGATAAAGAGGAAAGAGGACAATCTCT
CTCTGTGTGTGTAATTGGCTCCTCTGGGAGTTTCTCCAGAGAAACACCTTCCGTCCAGCGGCACCTC
CACGCCTCTTCCATGGTCGACATCCCACCTCCTTTCGACCTGGCCTGCATCACCAAGAAGCCCCATCACA
AAGAGCTCTCCCTCACTCCTGATCGAGAGCGACTCCCCGGACAAGTACAAGAAGAAGATCATCTTTTA
AGCGCTTCTGGCACTGACGTTTTAAGAAGAAGACGGAGAACAATTGCATGTGGATGTGAACGTGTCTTC
CTCTAGGTCCTCTCAGAGTCCAGCTACCACGGGCCTTCCAGGATTCTGGAAGTTGACCGGAGAAGCCTC
AGCAACTCCCCTCAGCTTAAGTCTCGGACTGGGAAGCTCCGGGCTTCTGAATCCCCTCCTCCCTCATCT
TTTATAGAGATGGCAAGAGGAAAGGTGTCCCTTCCAGCAGGACGGTGTCCAGAGTGGAGTCTTTGAAGA
CCGCTCCCGGCCGCCCTTCTGCCCTTGGCACTGACCAAGCCACGGTCCATCTCCTTCCCAGCGCTGAC
ACTTCAGACTATGAGAACATTCCAGCCATGAACCTCGGACTATGAGAATATCCAGATTCCACCCCGGAGAC
CTGCCAGGGCTGGCGGTTACGAAGCTGTTTGAAGATCAGAGCAGAGCCCTGTCCACAGCAAACGAAAA
TGATGGCTACGTGGACATGAGCAGCTTCAACGCCTTTGAGAGCAAACAGCAGAGTGCAGACCAGGACGCA
GAAAGCGCTACACAGAGCCCTACAAGTCTGTCCATCTCGTCCGACAGCCCCAAAGAGGACCTTACGT
CGGATGAAGAGCAGAGAAGCTCGGAGGAGGAGGACAGTGCTTCAAGAGACCCAGTGTACCCACAAAGGT
GGAAGGACAGTCCAGAGCCCTTGTATCGCACAGGAAGTCTATCTTCCAGAGAAAGCATACTGGAGATG
CTCCAGCACTTAAATCTGGATTTCCATGGAGCTGTATGAGGGCCTTGGATGACATGGACCATGAAGGCA
GAGACACATTGGCCCGGGAGGAGCTGAGGCAGGGCCTGAGTGAACCTCCAGCCATCCACGACCTTTCATCA
AGGCATCTGGAGGAGCTGGAGGAAAGGCTGTCAAATTTGGGAGAGCCAGCAGAAGGTAGCTGACGTCTTC
CTGGCCCGGGAGCAGGGGTTTGTACCCACGCCACTCACATCTGCAGTTCGACAGGTACCTAGGCTTTC
TCAGTGAGAATTGCCTCCACTCTCCCGGCTGGCAGCTGCTGTCCGTGAATTTGAGCAGAGTGTACAAG
AGGCAGCCAGACTGCGAAGCATCGGCTGCTGCGGGTGGTTCAACGCCTTCCAGTACCAAGTGCCTCCTC
ACAGACTATTTAAACAACCTTTTCCGGACTCCGCGGAGTACGACAACACACAGGGTGCAGTGCAGCTCA
TCTCAAAGTACAGACCGTGCCAAACGACAGCATGGAGCAAGGGGAAAACCTGCAGAAGCTGGTCCACAT
TGAGCACAGCGTCCGGGGCAAGGGATCTCCTCCAGCCAGGAAGGGAGTTTCTGAAGGAAGGGACGCTG
ATGAAAGTAAACAGGAAAAACAGACGGCCCGGCACCTATTTCTGATGAACGATGTGCTCCTGTACACCT
ATCCCCAGAAGGATGGGAAGTACCGGCTGAAGAACACATTGGCTGTGGCCAACATGAAGGTACGCCGCC
TGTGATGGAGAAAGTCCCTACGCTCTAAAGATTGAGACTCCGAGTCTGCCTGATGCTGTCTGCGAGC
TCCTGTGCAGAGAGGGACGAGTGGTATGGCTGTCTGAGCAGAGCCCTCCCTGAGGACTACAAGGCCAGG
CGCTGGCTGCATTCCACCATAGCGTGGAGATACGAGAGAGGCTGGGGGTTAGCCTTGGGGAGAGGCCCC
CACCTGGTGCCTGTACACACGTCATGATGTGCATGAACCTGCGGCTGCGACTTCTCCCTCACCTGCGG
CGTCATCACTGTACGCCTGTGGCAAGATCGTGTGCCGGAAGTGTTCGCGGAACAAGTACCCGCTGAAGT
ACCTGAAGGACAGGATGGCCAAGGTCTGCGACGGCTGCTTCGGGGAGCTGAAGAAGCGGGGACGGGCTGT
CCCGGGCTGATGAGAGAGCGGCTGTGAGCATGAGCTTCCCGCTGTCTTACCCCGCTTCTCGGGCAGT
GCCTTTTCATCCGTCTTCCAGAGCATAACCCCTCGACCTTCAAGAAGCAGAAGAAAGTCCCTTACGCC
TGACAGAGGTGGCTGCCTCTGGAGAGGGCTCTGCCATCAGTGGCTATCTCAGCCGGTGAAGAGGGGCAA
GCGGCACTGGAAGAAGCTCTGGTTTGTATCAAAGGCAAAGTTCTCTACACCTACATGGCCAGTGAAGGAC
AAAGTGGCCTTGAGAGATGCCTCTGCTAGGCTTACCATTGCTCCAGAAAAGGAAGAGGGCAGCAGTG
AAGTAGGACCTATTTTTACCTTTACCACAAGAAAACCTATTTTATAGCTTCAAAGCAGAAGATACCAA
TTCAGCTCAGAGGTGGATCGAGGCCATGGAAGATGCGAGTGTGTTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC229441 representing NM_152536
Red=Cloning site Green=Tags(s)

```
MFRGPKPIAPKRLTAPNEWRASVYLNDSLNKCSNGRLPCVDRGLDEGPR SIPKCSESETDEDYIVVPR
VPLREDEPKDEGSVGNKALVSPESAAEEEEEREEGGEACGLEGTGAGEDSVAPAAPGAGALSREGEETD
LALEDEGEGCADEPGTLEQVSRSEEEELVQPHRECSLEDSGPWAGEGVFQSDLLLPHIHGEDQEPDTP
GEAEEDDEEGCASTDPAGADEGSGPDRPTEDMGQDAEDTSEEPPEKEELAGVQEAEATADCPEVLEECE
EATGVTGGEQVDLSEPPDHEKTNQEVAATLEDHAQDESAEESCQIVPFENDCMEDFVTLTGSPEYFF
PTESTSFCSESCSPLSESAKGLSEQAPKLG LRAEENPMVGALCGQCGLQGGAAEGPAAPDVVVVLEEE
ALDDALANPYVMGVGLPGQAAPGEGGQAASDALGGYGSKEELNCEAEGGLVPADRKNTSTRVPHSGKVA
GYVPETVPEETGPEAGSSAPGIGGAAEEVGKTL SLEKPLEASRALPAKPRAFTLYPRSFVSEGREIPV
SVYQEPEGSGLDHRIRKEDNLSLSCVIGSSGSFSQRNHLSSSGTSTPSSMVDIPPPFDLACITKKPIT
KSSPSSLIESDSPDKYKKKSSFKRFLALTFKKKTENKLHVDVNVSSRSSESSYHGPSRILEVDRRSL
SNPQLKSRGTGLRASEPSSLIFYRDGKRKGVPFSRTVSRVESFEDRSRPPFLPLPTKPRISIFPSAD
TSDYENIPAMNSDYENIQIPRRPARAGFTKLFEDQSRALSTANENDGYVDMSSFNAFESKQQSADQDA
ESAYTEPYKVCPISSAAPKEDLTSDEEQRSSEEDSASRDP SVTHKVEGQSRALVIAQELLSSKEYVEM
LQHLNLD F HGAVMRALDDMDHEGRD LAREELRQGLSELPAIHDLHQGILEELEERLSNWESQKQVADV
LAREQGFDDHATHILQFDRYLGLLSENCHSPRLAAAVREFEQSVQGGSTAKHRLLRVVQRLFQYQVLL
TDYLNLLCPD SAEYDNTQGALSLISKVTD RANDSMEQGENLQKL VHI EHSVRGQGDLLQPGREFLKEGTL
MKVVTGKNRRRPHLFLMNDVLLYTPQKDGKYRLKNTLAVANMKVSRPVMEKVYPYALKIETSESCLML SAS
SCAERDEWYGCLSRALPEDYKAQALAAFHHSVEIRERLGVSLGERPPTLVPVTHVMCMNCGCDLSLTLR
RHHCHACGKIVCRNCSRNYPLKYLKDRMAKVCDCGCFGELKKRGRAVPLMRERPVSMSFPLSSPRFSGS
AFSSVFQSI NPSTFKKQKKVPSALTEVAASGEGSAISGYLSRCKRGRHWKKLWFVIKGVLYTYMASED
KV ALESMP LLGFTIAPEKEEGSSEVGP I FHL YHKKTLFYSFKAEDTNSAQRWIEAMEDASVL
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

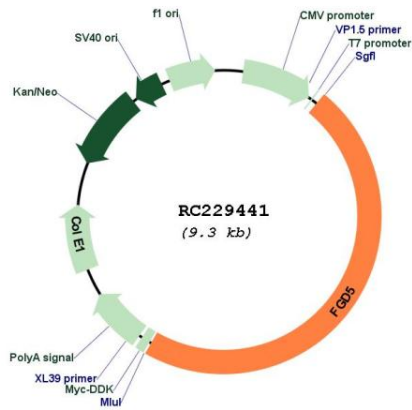


ACCN: NM_152536

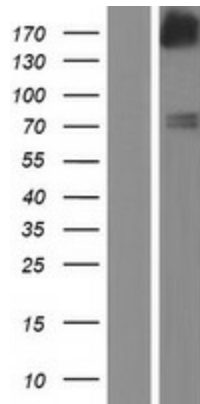
ORF Size: 4386 bp

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_152536.4
RefSeq ORF:	4389 bp
Locus ID:	152273
UniProt ID:	Q6ZNL6
Cytogenetics:	3p25.1
Domains:	RhoGEF, FYVE, PH
MW:	159.7 kDa
Gene Summary:	Activates CDC42, a member of the Ras-like family of Rho- and Rac proteins, by exchanging bound GDP for free GTP. Mediates VEGF-induced CDC42 activation. May regulate proangiogenic action of VEGF in vascular endothelial cells, including network formation, directional movement and proliferation. May play a role in regulating the actin cytoskeleton and cell shape.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC229441



Western blot validation of overexpression lysate (Cat# [LY432449]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229441 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).