

Product datasheet for **RG205644**

FGD2 (NM_173558) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGD2 (NM_173558) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FGD2
Synonyms:	ZFYVE4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG205644 representing NM_173558
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGGGGGCAAGTGAGGAGAAGCTGGCATCTGTGTCCAACCTGGTCACTGTGTTTGAGAATAGCAGGA
CCCCAGAAGCAGCACCCAGAGGCCACAGGCTAGAGGACGTGCATCACCGCCTGAGTGCAGGCCTCCCGA
GTCCCCAGGACCACGGGAGAAGACGAATGTCGGGGAGGCCGTGGGGTCTGAGCCCAGGACAGTCAGCAGG
AGGTACCTGAACTCCCTGAAGAACAAGCTGTCCAGCGAAGCCTGGAGGAAATCTTGCCAGCCTGTGACCC
TCTCAGGATCGGGGACGCAGGAGCCAGAGAAGAAGATCGTCCAGGAGCTGCTGGAGACAGAGCAGGCCTA
TGTGGCGCGCCTCCACCTGCTAGACCAGGTGTTTTCCAGGAGCTGCTGAAGACAGCCCGCAGCAGCAAG
GCCTTCCCAGAGGATGTGGTCAGGGTCATCTTCCAACATCTCCTCCATCTATCAGTTCATTCTCAGT
TCTTCTCCAGAGCTGCAGCGCGCCTGGACGACTGGACAGCTAACCCCGCATCGGTGACGTGATCCA
GAAGCTGGCCCCCTTCCGAAGATGTACAGTGAGTATGTCAAGAACTTTGAGCGAGCGGCTGAGCTGCTG
GCCACCTGGACCGACAAGTCTCCACTCTCCAGGAGGTTCTCACTCGCATCCAGAGCAGCGAGGCTTCGG
GCAGCCTGACCCTGCAGCACCACATGCTGGAACAGTGCAGAGAATTCCACGTTACGAGCTGCTGCTCAA
GGAGTACATCCAGAAGCTGCCAGCCAGGCCCCAGACCAGGCCGATGCCAGAAAGCCCTGGACATGATC
TTCTCAGCTGCCAGCACTCCAATGCAGCCATCACTGAGATGGAGCGGCTGCAGGACCTGTGGGAGGTGT
ACCAGCGCCTGGGCCTCGAGGACGACATAGTAGACCCCTAACACCCCTGCTCCGTGAGGGCCCGGTCT
CAAGATCTCTCCGCGCAACGACCCCATGGAGCGCTACCTTTTCTTGTCAACAACATGCTGCTCTAC
AGTGTGCCAGGGTGTATCCAGGTGGCGCCAGTTCCAGGTGAGGACCCGCATCGATGTGGCCGGGATGA
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GCTGCAAGCCCGTCCCAGGAGGAAATGATTTCTGGATGCAGGCCTTCCAAGCAGCCATTGACCAAATC
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ACGCATTCTCACTGAAATGTGCTGCCTGAGGCCAAGGAGGACAAGAGGCGGGCATCCTGGAGAAAGG
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AGCGGCCCCCGGGCTGGTGTGTGATCCCTCGGATGACCCCTCGTGTCTATGTCTATGCTGCCCTC
AGGACATGAGGGCTCACACCTCCATCCCCTGCTGGGCTACCAGGTGACTGTTGGCCCCAGGGGACCC
TCGGGTCTCCAGCTACAGCAGTCAGGCCAGCTTACACCTTCAAGGCCGAGACGGAGGAGCTGAAGGGC
CGCTGGTGAAGGCCATGGAGCGGGCGGCCAGTGGCTGGAGCCCCAGCTGGCCCAACGATGGGGACCTGT
CCGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG205644 representing NM_173558
Red=Cloning site Green=Tags(s)

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MKGASEEKLASVSNLVTVFENSRTPEAAPRGHRLLEDVHHRPECRPPESPGPREKTNVGEAVGSEPRTVSR
RYLNSLKNKLSSEAWRKSCQPVTLSGSGTQEPEKKIVQELLETEQAYVARLHLLDQVFFQELLKTRSSK
AFPEDVVRVIFSNISSIYQFHSQFFLPELQRRLLDDWTANPRIGDVIQKLAPFLKMYSEYVKNFERAAELL
ATWTDKSPLFQEVLTRIQSSEASGSLTLQHMHLEPVQRIPRYELLLKEYIQKLPAPDQADAQKALDMI
FSAAQHSNAAITEMERLQDLWEVYQRLGLEDDIVDPSNTLLREGPVLKISFRRNDPMERYLFLFNNMLLY
CVPRVIQVGAQFQVRTRIDVAGMKVRELMDAEFPHSFLVSGKQRTLELQARSQEEMISWMQAFQAAIDQI
EKRNETFKAAAQGPEDIQEQELQSEELGLRAPQWRDKMVTMCMRCQEPFNALTRRRHHCACGYVCA
RCSDYRAELKYDDNRPNRVCLHCYAFLTGNVLPEAKEDKRRGILEKGSSATPDQSLMCSFLQLIGDKWGK
SGPRGWCVIPRDDPLVLVYAA PQDMRAHTSIPLLLGYQVTVGPQGDPRVFLQDQSSQLYTFKAETEELKG
RWWKAMERAASGWSPSWPNDGDLSD
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_173558

ORF Size: 1965 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_173558.2](#), [NP_775829.1](#)

RefSeq Size: 3134 bp

RefSeq ORF: 1968 bp

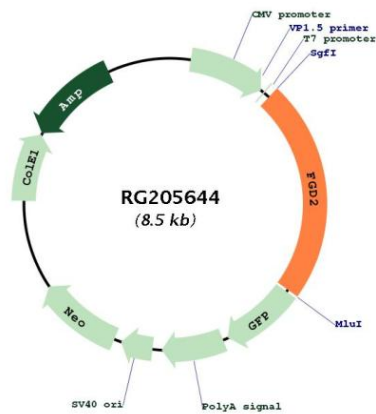
Locus ID: 221472

UniProt ID: [Q7Z6I4](#)

Cytogenetics: 6p21.2

Gene Summary: The protein encoded by this gene belongs to a family of guanine nucleotide exchange factors (GEFs) which control cytoskeleton-dependent membrane rearrangements by activating the cell division cycle 42 (CDC42) protein. This gene is expressed in B lymphocytes, macrophages, and dendritic cells. The encoded protein may play a role in leukocyte signaling and vesicle trafficking in antigen-presenting cells in the immune system. [provided by RefSeq, Oct 2016]

Product images:



Circular map for RG205644