

Product datasheet for **RC205644**

FGD2 (NM_173558) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGD2 (NM_173558) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FGD2
Synonyms:	ZFYVE4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC205644 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGGGGGCAAGTGAGGAGAAGCTGGCATCTGTGTCCAACCTGGTCACTGTGTTTGAATAAGCAGGA
 CCCAGAAAGCAGCACCCAGAGGCCACAGGCTAGAGGACGTGCATCACCGCCTGAGTGCAGGCCTCCCGA
 GTCCCCAGGACCACGGGAGAAGACGAATGTCGGGGAGGCCGTGGGGTCTGAGCCCAGGACAGTCAGCAGG
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 CGTGGGTGAAGGCCATGGAGCGGGCGGCCAGTGGCTGGAGCCCCAGCTGGCCCAACGATGGGGACCTGT
 CCGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RC205644 protein sequence
Red=Cloning site Green=Tags(s)

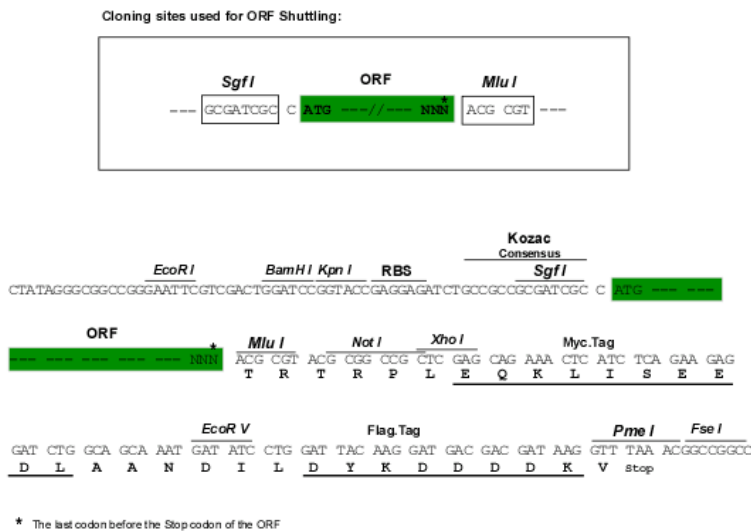
MKGASEEKLASVSNLVTVFENSRTPEAAPRGHRLLEDVHHRPECRPPESPGPREKTNVGEAVGSEPTVSR
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 AFPEDVVRVIFSNISSIYQFHSQFFLPELQRRLLDDWTANPRIGDVIQKLAFLKMYSEYVKNFERAAELL
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 RCSDYRAELKYDDNRPNRVCLHCYAFLTGNVLPEAKEDKRRGILEKGSSATPDQSLMCSFLQLIGDKWGK
 SGPRGWCVIPRDDPLVLYVYAAPQDMRAHTSIPLLLGYQVTVGPQGDPRVFLQDQSSQLYTFKAETEELKG
 RWWKAMERAASGWSPSWPNDGDLSD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6564_a12.zip

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_173558.2](#), [NP_775829.1](#)

RefSeq Size: 3045 bp

RefSeq ORF: 1968 bp

Locus ID: 221472

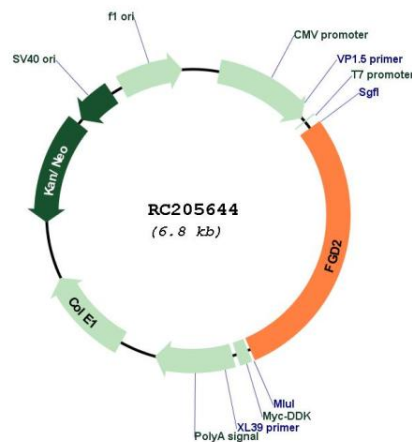
UniProt ID: [Q7Z6J4](#)

Cytogenetics: 6p21.2

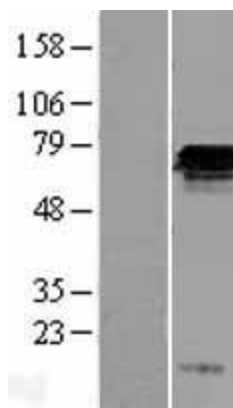
MW: 74.9 kDa

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]

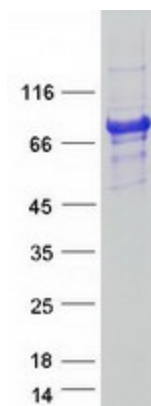
Product images:



Circular map for RC205644



Western blot validation of overexpression lysate (Cat# [LY406469]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205644 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FGD2 protein (Cat# [TP305644]). The protein was produced from HEK293T cells transfected with FGD2 cDNA clone (Cat# RC205644) using MegaTran 2.0 (Cat# [TT210002]).