

Product datasheet for **RC203337**

ZFYVE21 (NM_024071) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZFYVE21 (NM_024071) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZFYVE21
Synonyms:	HCVP7TP1; ZF21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203337 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCTCCGAGGTGTCCGCGCGCCGCGACGCCAAGAAGCTGGTGCCTCCCCGAGCGGCCTGCGCATGG
TGCCCGAACACCCGCGCTTCGGAAGCCCGTTCGGCCTGGAGGAGCCGAGTGGGTCCCGACAAGGAGTG
TCGGAGATGTATGCAGTGTGACGCCAAGTTTGACTTTCTACCAGAAAGCACCCTGTCGCCGCTGCGGG
AAGTGCTTCTGCGACAGGTGCTGCAGCCAGAAGGTGCCGCTGCGGCGCATGTGCTTTGTGGACCCCGTGC
GGCAGTGC GCGGAGTGC GCCCTCGTGTCCCTCAAGGAGGCGGAGTTCTACGACAAGCAGCTCAAAGTGCT
CCTGAGCGGAGCCACCTTCCTCGTCACGTTTGGAACTCAGAGAACTGAACTATGACTTGTCGTCTT
TCCAATAACCAGAGATACTTGTTCGGATGGAGACAGCCACTATGAAATCGAAATTGTACACATTTCCA
CCGTGCAGATCCTCACAGAAGGCTTCCTCCTGGAGGAGGCAACGCACGGGCCACAGGCATGTTCTCGCA
GTATACAGTGCCGGGACGGAGGGTGTGACCCAGCTGAAGCTGACAGTGGTGGAGGACGTGACTGTGGGC
AGGAGGCAGGCGGTGGCGTGGCTAGTGGCCATGCACAAGGCTGCCAAGCTCCTCTATGAATCTCGGGACC
AG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203337 protein sequence
Red=Cloning site Green=Tags(s)

MSSEVSARRDAKKLVRSPLGRMVP EHRAFGSPFGL EEPQWVPDKECRRCMQCDAKFDL TRKHHCRRCG
 KCFCDRCCSQKVP LRRMCFVDPVRQCAECALVSLKEAFYDKQLKVL LSGATFLVTFGNSEKPEMTCL
 SNNQRYLFLDGD SHYEIEIVHISTVQIL TEGFPPGGGNARATGMFLQYTVPGTEGVTQLKLT VVEDVTVG
 RRQAVAWLVAMHKA AKLLYESRDQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6417_e12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_024071

ORF Size: 702 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_024071.4](#)

RefSeq Size: 1470 bp

RefSeq ORF: 705 bp

Locus ID: 79038

UniProt ID: [Q9BQ24](#)

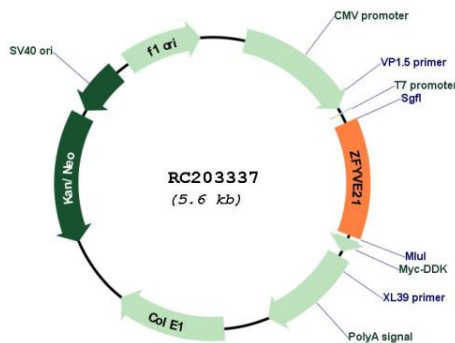
Cytogenetics: 14q32.33

Domains: FYVE

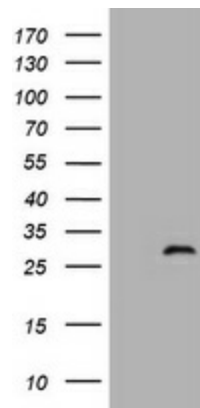
MW: 26.5 kDa

Gene Summary: Plays a role in cell adhesion, and thereby in cell motility which requires repeated formation and disassembly of focal adhesions. Regulates microtubule-induced PTK2/FAK1 dephosphorylation, an event important for focal adhesion disassembly, as well as integrin beta-1/ITGB1 cell surface expression.[UniProtKB/Swiss-Prot Function]

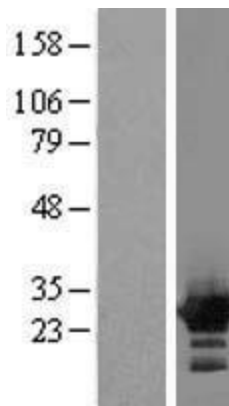
Product images:



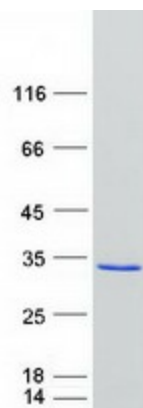
Circular map for RC203337



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ZFYVE21 (Cat# RC203337, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ZFYVE21 (Cat# [TA505622]). Positive lysates [LY411387] (100ug) and [LC411387] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY411387]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203337 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ZFYVE21 protein (Cat# [TP303337]). The protein was produced from HEK293T cells transfected with ZFYVE21 cDNA clone (Cat# RC203337) using MegaTran 2.0 (Cat# [TT210002]).