

Product datasheet for **RC207465**

RUFY1 (NM_001040451) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RUFY1 (NM_001040451) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RUFY1
Synonyms:	RABIP4; ZFYVE12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC207465 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGATGGAGGAGCGTGCCAACTGATGCACATGATGAACTCAGCATCAAGGTGTTGCTCCAGTCGGCTC
 TGAGCCTGGGCCGAGCCTGGATGCGGACCATGCCCCCTTGACAGCAGTTCTTTGTAGTGATGGAGCACTG
 CCTCAAACATGGGCTGAAAGTTAAGAAGAGTTTTATTGGCCAAAATAAATCATTCTTTGGTCTTTGGAG
 CTGGTGGAGAACTTTGTCCAGAAGCATCAGATATAGCGACTAGTGTAGAAATCTTCCAGAATTAAGA
 CAGCTGTGGGAAGAGGCCGAGCGTGGCTTTATCTTGCACATGCAAAAGAACTGGCAGATTATCTGAA
 AGTGCTTATAGACAATAAACATCTTTAAGCGAGTTCTATGAGCCTGAGGCTTTAATGATGGAGGAAGA
 GGGATGGTGATTGTTGGTCTGCTGGTGGGACTCAATGTTCTCGATGCCAATCTCTGCTTAAAGGAGAAG
 ACTTGGATTCTCAGTTGGAGTAATAGATTTTTCCCTCTACCTTAAGGATGTGCAGGATCTTGATGGTGG
 CAAGGAGCATGAAAGAATTACTGATGTCCTTGATCAAAAAAATTATGTGGAAGAACTTAACCGGCACCTG
 AGCTGCACAGTTGGGGATCTTCAAACCAAGATAGATGGCTTGGAAAAGACTAACTCAAAGCTTCAAGAAG
 AGCTTTCAGCTGCAACAGACCGAATTTGCTCAGCTTCAAGAAGAACAGCAGCAGTTAAGAGAACAAAATGA
 ATTAATTCGAGAAAGAAGTGAAGAGAGTGTAGAGATAACAAAACAGGATACCAAAGTTGAGCTGGAGACT
 TACAAGCAAACCTCGGCAAGGTCTGGATGAAATGTACAGTGATGTGTGGAAGCAGCTAAAAGAGGAGAAGA
 AAGTCCGGTTGGAACGGAAAAAGAACTGGAGTTACAAATTGGAATGAAAACCGAAATGGAATTTGCAAT
 GAAGTTACTGGAAGGACACCCACGAGAAGCAGGACACACTAGTTGCCCTCCGCCAGCAGCTGGAAGAA
 GTCAAAGCGATTAATTTACAGATGTTTACAAAGCTCAGAATGCAGAGAGCAGTTTGCAGCAGAAGAATG
 AAGCCATCACATCCTTTGAAGGAAAAACCAACCAAGTTATGTCCAGCATGAAACAAATGGAAGAAAGGTT
 GCAGCACTCGGAGCGGGCAGGAGCGAGGAGCTGAGGAGCGGAGCCACAAGCTGCAGCAGGAGCTGGCGGG
 AGGATCGGCGCCCTGCAGCTGCAGCTCTCCAGCTGCACGAGCAATGCTCAAGCCTGGAGAAAGAATTGA
 AATCAGAAAAAGAGCAAAGACAGGCTCTTCAGCGCAATTACAGCACGAGAAAGACACTTCTCTACT
 CAGGATGGAGCTGCAACAAGTGAAGGACTGAAAAGGAGTTGCGGGAGCTTCAGGACGAGAAGGCAGAG
 CTGCAGAAGATCTGCGAGGAGCAGGAACAAGCCCTCCAGGAAATGGGCCTGCACCTCAGCCAGTCCAAGC
 TGAAGATGGAAGATATAAAAGAAGTGAACCAGGCACTGAAGGGCCACGCCTGGTGAAGATGACGAAGC
 GACACACTGTAGGCAGTGTGAGAAGGAGTTCTCCATTTCCGGAGAAAGCACCCTGCCGGAAGTGTGGC
 CACATCTTCTGCAACACCTGCTCCAGCAACGAGCTGGCCCTGCCCTCTACCCCAAGCCGGTGCAGGTG
 GCGACAGCTGCCACACCCTGCTCTGCAGCGCTGCTCCTCCACGGCTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207465 protein sequence
 Red=Cloning site Green=Tags(s)

MMEERANLMHMMKLSIKVLLQSALSLGRSLDADHAPLQQFFVVMHCLKHGLKVKKSFIFGQNKSFSGPLE
 LVEKLCPEASDIATSVRNLPELKTAVGRGRAWLYLALMQKKLADYLVKVIDNKHLLSEFYEPALMMEEE
 GMVIVGLLVGLNVLDANLCLKGEDLDSQVGVDFSLYLKDVQDLGGKEHERITDVLQKQNYVEELNRHL
 SCTVGLDQTKIDGLEKTNKLEELSAATDRICSLQEEQQQLREQNELIRERSEKSEVITKQDTKVELET
 YKQTRQGLDEMYSDVWVKLKEEKVRLLEKELELQIGMKTEMEIAMKLEKDTHEKQDTLVALRQQLLEE
 VKAINLQMFHKAQNAESSLQKNEAITSFEGKTNQVMSSMKQMEERLQHSERARQGAEEERSHKLQQLGG
 RIGALQLQLSQLHEQCSSLEKELKSEKEQRQALQRELQHEKDTSSLLRMELQQVEGLKRELQDEKAE
 LQKICEEQEQALQEMGLHLQSKLKMEDIKEVQALKGHAWLKDEATHCRQCEKEFSISRRKHHCRCNG
 HIFCNTCSSNELALPSYKPVVRCDSCHTLLLRCSSTAS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6784_b03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001040451

ORF Size: 1800 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_001040451.3](#)

RefSeq Size: 2674 bp

RefSeq ORF: 1803 bp

Locus ID: 80230

UniProt ID: [Q96T51](#)

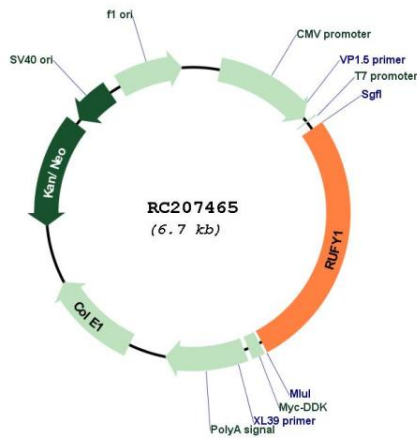
Cytogenetics: 5q35.3

Protein Pathways: Endocytosis

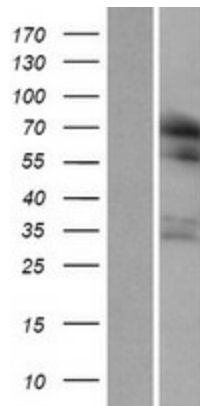
MW: 69.1 kDa

Gene Summary: This gene encodes a protein that contains a RUN domain and a FYVE-type zinc finger domain. The encoded protein binds to phosphatidylinositol-3-phosphate (PI3P) and plays a role in early endosomal trafficking, tethering and fusion through interactions with small GTPases including Rab4, Rab5 and Rab14. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2011]

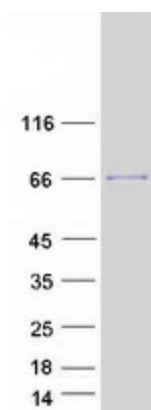
Product images:



Circular map for RC207465



Western blot validation of overexpression lysate (Cat# [LY421767]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207465 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RUFY1 protein (Cat# [TP307465]). The protein was produced from HEK293T cells transfected with RUFY1 cDNA clone (Cat# RC207465) using MegaTran 2.0 (Cat# [TT210002]).