

Product datasheet for **RC217181**

RUFY1 (NM_025158) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RUFY1 (NM_025158) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RC217181 representing NM_025158
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCGACCGGGAAGGCGGCTGCGCTGCTGGGCGGGGGCGGAGCTGGAGCCGGAGCTGGAGCCGGGGC
 CGGGGCCCGGTCAGCGCTTGGCCGGGAGAAGAGTTTGGATCGTGGACCGAAGCCAGCTGCCCGGCC
 AGGCGACCTGCGGAGCGCAACGAGGCGCGGGCGCCGAGGGCTGGTGGCGCCCATCTGACCCTGGCA
 CGCAGGGCCACCGGAACCTGTCGGCGAGCTGCGGGAGCGCGCTGCGCGCGGCCGCGGGGCTGGCGGGC
 GGGACAGCGGGGACGGCACGGCGCGCAGCTTCTAAGTGCCAGATGATGGAGGAGCGTCCCAACCTGAT
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 CAACGAGCTGGCCCTGCCTCCTACCCCAAGCCGGTGGAGTGTGCGACAGCTGCCACACCTGTCTCTG
 CAGCGTGTCTCTCCACGGCTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
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Protein Sequence: >RC217181 representing NM_025158
Red=Cloning site Green=Tags(s)

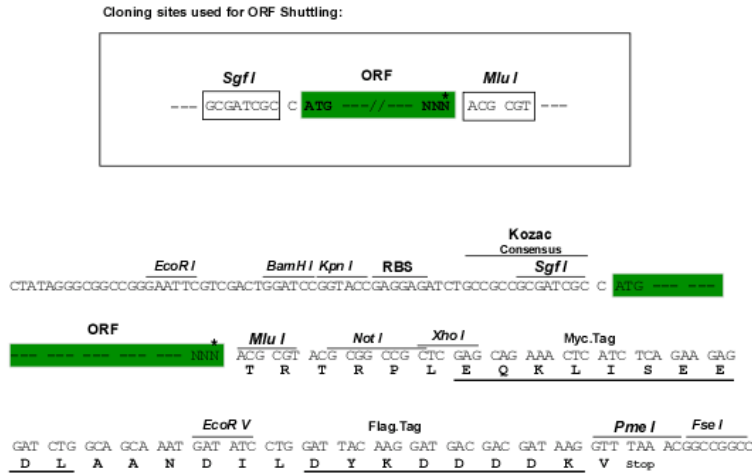
MADREGGCAAGRGRELEPELEPGPGPSALEPGEEFEIVDRSQLPGPGDLRSATRPRAAEGWSAPILTLA
 RRATGNLSASCGSALRAAAGLGGDSGDGTARAASKCQMMEEANLMHMMKLSIKVLLQSALSLGRSLDA
 DHAPLQQFFVVMHCLKHGLKVKKSF IGQNKSF FGPLELVEKLCPEASDIATSVRNLPKLTAVGRGRAW
 LYLALMQKKLADYLKVLIDNKHLLSEFYEPEALMMEEEGMVIVGLLVGLNVL DANLCLKGEDLDSQVQVI
 DFLSLYLKDVQDL DGGKEHERITDVL DQKNYVEELNRHLSCTVGD LQTKIDGLEKTN SKLQEEL SAATDRI
 CSLQEEQQQLREQNELIRERSEKSV EITKQDTKVELETYKQTRQGLDEMYS DVVKQLKEEKV RLELEKE
 LELQIGMKT EMIAMK LLEKDTHEKQDTL VALRQQL EEVKAINLQMFHKAQNAESSLQQKNEAITSFEGK
 TNQVMSSMKQMEERLQHSEARARQGA EERSHKLQQELGGRIGALQLQLSQLHEQCSLEKELKSEKEQRQA
 LQRELQHEKDTSSLLRMELQQVEGLKRELQDEKAELQKICEEQEQALQEMGLHL SQSKLKMEDIKEV
 NQALKGHAWLKDDEATHCRQCEKFSISRKHHCRCNGHIFCNTCSSNELALPSYPKPVVRCDSCHTLLL
 QRCSSSTAS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8018_a12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_025158

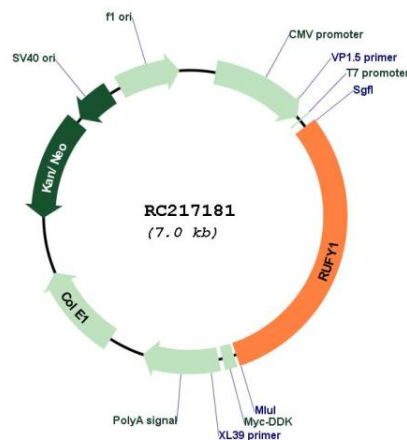
ORF Size: 2124 bp

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](#)

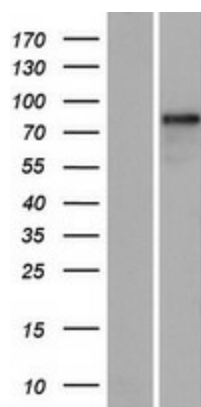
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_025158.5</u>
RefSeq Size:	2644 bp
RefSeq ORF:	2127 bp
Locus ID:	80230
UniProt ID:	<u>Q96T51</u>
Cytogenetics:	5q35.3
Domains:	FYVE, RUN
Protein Pathways:	Endocytosis
MW:	79.6 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]

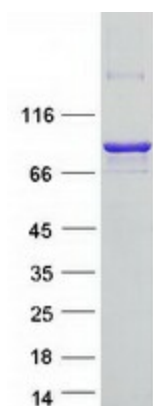
Product images:



Circular map for RC217181



Western blot validation of overexpression lysate (Cat# [LY410873]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217181 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RUFY1 protein (Cat# [TP317181]). The protein was produced from HEK293T cells transfected with RUFY1 cDNA clone (Cat# RC217181) using MegaTran 2.0 (Cat# [TT210002]).