

Product datasheet for **RG214130**

RUFY1 (NM_001040452) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RUFY1 (NM_001040452) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RUFY1
Synonyms:	RABIP4; ZFYVE12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG214130 representing NM_001040452
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGATGGAGGAGCGTGCCAACTGATGCACATGATGAACTCAGCATCAAGGTGTTGCTCCAGTCGGCTC
 TGAGCCTGGGCCGAGCCTGGATGCGGACCATGCCCCCTTGACAGCAGTCTTTGTAGTGATGGAGCACTG
 CCTCAAACATGGGCTGAAAGTTAAGAAGAGTTTTATTGGCCAAAATAAATCATTCTTTGGTCTTTGGAG
 CTGGTGGAGAACTTTGTCCAGAAGCATCAGATATAGCGACTAGTGTGAGAAATCTCCAGAATTAAGA
 CAGCTGTGGGAAGAGGCCGAGCGTGGCTTTATCTTGCACATGCAAAAGAACTGGCAGATTATCTGAA
 AGTGCTTATAGACAATAAACATCTCTTAAGCGAGTTCTATGAGCCTGAGGCTTTAATGATGGAGGAAGA
 GGGATGGTGATTGTTGGTCTGCTGGTGGGACTCAATGTTCTCGATGCCAATCTCTGCTTGAAGGAGAAG
 ACTTGGATTCTCAGTTGGAGTAATAGATTTTTCCCTCTACCTTAAGGATGTGCAGGATCTTGATGGTGG
 CAAGGAGCATGAAAGAATTACTGATGTCCTTGATCAAAAAAATTATGTGGAAGAACTTAACCGGCACCTG
 AGCTGCACAGTTGGGGATCTTCAAACCAAGATAGATGGCTTGGAAAAGACTAACTCAAAGCTTCAAGAAG
 AGCTTTCAGCTGCAACAGACCGAATTTGCTCAGTTCCTCAAGAAGAACAGCAGCAGTTAAGAGAACAAAATGA
 ATTAATTCGAGAAAGAAGTGAAGAGAGTGTAGAGATAACAAAACAGGATACCAAAGTTGAGCTGGAGACT
 TACAAGCAAACCTCGCAAGGTCTGGATGAAATGTACAGTGATGTGTGGAAGCAGCTAAAAGAGGAGAAGA
 AAGTCCGGTTGGAAGTGGAAAAGAACTGGAGTTACAAATTGGAATGAAAACCGAAATGGAATTTGCAAT
 GAAGTTACTGAAAAGGACACCCACGAGAAGCAGGACACACTAGTTGCCCTCCGCCAGCAGCTGGAAGAA
 GTCAAAGCGATTAATTTACAGATGTTTACAAAGCTCAGAATGCAGAGAGCAGTTTGCAGCAGAAGAATG
 AAGCCATCACATCCTTTGAAGGAAAACCAACCAAGTTATGTCCAGCATGAAACAATGGAAGAAGGTT
 GCAGCACTCGGAGCGGGCAGGCGAGGGGCTGAGGAGCGGAGCCACAAGCTGCAGCAGGAGCTGGGCGGG
 AGGATCGGCGCCCTGCAGCTGCAGCTCTCCAGCTGCACGAGCAATGCTCAAGCCTGGAGAAAGAATTGA
 AATCAGAAAAGAGCAAAGACAGGCTCTTCAGCGCAATTACAGCACGAGAAAAGACACTTCTCTACT
 CAGGATGGAGCTGCAACAAGTGAAGGACTGAAAAGGAGTTGCGGGAGCTTCAGGACGAGAAGGCAGAG
 CTGCAGAAGATCTGCGAGGAGCAGGAACAAGCCCTCCAGGAAATGGGCCTGCACCTCAGCCAGTCCAAGC
 TGAAGATGGAAGATATAAAAAGAGTGAACCAGGCACTGAAGGGCCACGCCTGGTGAAGATGACGAAGC
 GACACACTGTAGGCAGTGTGAGAAGGAGTTCTCCATTTCCGGAGAAAGCACCCTGCCGGAAGTGTGGC
 CACATCTTCTGCAACACCTGCTCCAGCAACGAGCTGGCCCTGCCCTCTACCCCAAGCCGGTGCAGAGTGT
 GCGACAGCTGCCACACCCTGCTCTGCAGCGCTGCTCCTCCACGGCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG214130 representing NM_001040452
 Red=Cloning site Green=Tags(s)

MMEERANLMHMMKLSIKVLLQSALSLGRSLDADHAPLQQFFVVMHCLKHGLKVKKSFVIGQNKSFVGFPLE
 LVEKLCPEASDIATSVRNLPKLTAVGRGRAWLYLALMQKKLADYLVKLVLDNKHLLSEFYEPALMEEE
 GMVIVGLLVGLNVLNLDANLCLKGEDLDSQVGVDFSLYLKDVQDLGDKHEHERITDVLQKQNYVEELNRHL
 SCTVGDLDQTKIDGLEKTNKSLQEELSAATDRICSLQEEQQQLREQNELIRERSEKVEITKQDTKVELET
 YKQTRQGLDEMYSDVWVKLKEEKVRLLEKELELQIGMKTEMIAMKLEKDTHEKQDTLVALRQQLLEE
 VKAINLQMFHKAQNAESSLQKNEAITSFEGKTNQVMSSMKQMEERLQHSERARQGAEEERSHKLQELGG
 RIGALQLQLSQLHEQCSSLEKELKSEKEQRQALQRELQHEKDTSSLLRMELQQVEGLKRELQDEKAE
 LQKICEEQEQALQEMGLHLSQSKLMEDIKEVNQALKGHAWLKDEATHCRQCEKEFSISRRKHHCRCNG
 HIFCNTCSSNELALPSYKPKVVRVCDSCHTLLLQRCSSSTAS

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

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:	NM_001040452.3
RefSeq Size:	2485 bp
RefSeq ORF:	1803 bp
Locus ID:	80230
UniProt ID:	Q96T51
Cytogenetics:	5q35.3
Protein Pathways:	Endocytosis
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]