

Product datasheet for **RG216656**

RUFY4 (NM_198483) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	RUFY4
Synonyms:	ZFYVE31
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG216656 representing NM_198483
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGTTCTCAGAGTCACGCTGCTCCAGTTCACCCAAACCCAGGGAAGGAGACCCAGAAAAACAAAGATG
CCCCAAAGAAGATCCCAGCCGATATGGAGGGCCTGAAATGTCCAGATTGAGGACTCACACACCAAGTCA
AGCCATCTGTCTGCAAGATGCACCCAGTGGACAGCAGCTGGCAGGGCTTCCAGGTCCCAGCAACAAAGG
CATCTTCTTTCTTTTGGAAAAGAAGGGGAAAGTTCCAGGAAACATAGGTACCCAGAGCATGTGGG
AGCCAGAAGGGAAGGAGCTTCAGCTAGACCAGGAGGAAAGAGCCCATGGATTGAGATCTTCTGGGGAA
CTCAACACCCAGCACCCAGGGACAGGGGAAGGGGCTATGGGCACTCAGAAGGAGGTGATAGGGATGGAG
GCTGAGGTCACAGGGTCTGCTGTTGCAGAGGTCAGAGAACAACAGAGGGGACTCACAAAAAGGAAG
CAGAGTGGAGTCACGTCCAGAGGCTGCTGATGCCTAGCCCCAGAGGGGCTGTAGAGGAGCAGTATCAGG
GAGCAGGCAGGGGTCGGGGGGCTCTAGCATCCTGGGGAGCCCTGGGTCTTCAGGGACACGCAACAAAG
GAAGACTCTACCGTGGAGAATCCACAAGTGCAAAACAGAAGTGACCTTGTGGCCAGAAGGGAGGACAAAG
CCGAGGTGTCCCTGCAGGACGAGATCAAGAGCCTCAGACTTGGGCTCCGGAAGGCTGAGGAGCAGGCCCA
GCGCCAGGAGCAGCTGCTGAGGAGCAGGAGGGGAGCTGCAGGCACTTCGGGAGCAGCTCAGCAGGTGT
CAGGAAGAGAGAGCCGAGCTGCAGGCACAGCTGGAGCAGAAGCAACAGGAGGCTGAGAGGAGGATGCCA
TGTACCAGGAGGAGCTTGGAGGGCAGCGGACTTGGTCCAGGCCATGAAGAGCGGGTGTGGAAGTATGAT
CCAAGAGAAGGACCGCTGTGGCAGAGGCTCCAGCATCTCTTCCATGGCTCCCGAGTGCTGTGTGGCC
TGTAAGCAAGATCTTGGCCGATTTCTCGCGGTATCCATGCAGGCTCTGTGGAGGCTGCTGTGCCATG
CTTGCTCCATGGATTACAAGAAGAGAGACCGCTGCTGCCACCCTGCGCCAGGGAAGAGAAGCCAGGT
CACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



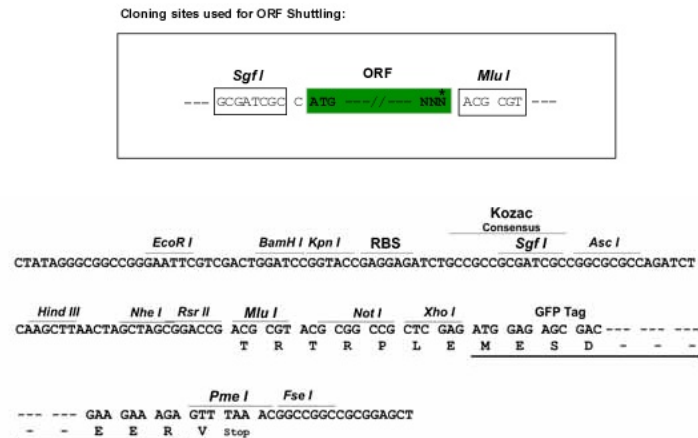
Protein Sequence: >RG216656 representing NM_198483
Red=Cloning site Green=Tags(s)

MFSESRCSSSTQTQGRPRKNKDAPKKIPAAAYGGPENQIEDSHTSQAICLQDAPSGQQLAGLPRSQQQR
HLPFFLEKKGESSRKHRYPSMWEPEGKELQLDQEERAPWIEIFLGNSTPSTQGQKGAMGTQKEVIGME
AEVTGVLVAEGQRTTEGTHKKEAEWSHVQRLLMPSPRGAVEGAVSGSRQSGGSSILGEPWVLQGHATK
EDSTVENPQVQTEVTLVARREEQAEVSLQDEIKSLRLGLRKAEEQAQRQEQLLREQEGELQALREQLSRC
QEERAELQAQLEQKQQAERRDAMYQEELGGQRDLVQAMKRRVLELIQEKDRLWQRLQHLSSMAPECCVA
CSKIFGRFSRRYPCRLCGLLCHACSMDDYKKDRCCPPCAQGREAVT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_198483

ORF Size: 1194 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_198483.1](#), [NP_940885.1](#)

RefSeq Size: 3567 bp

RefSeq ORF: 1716 bp

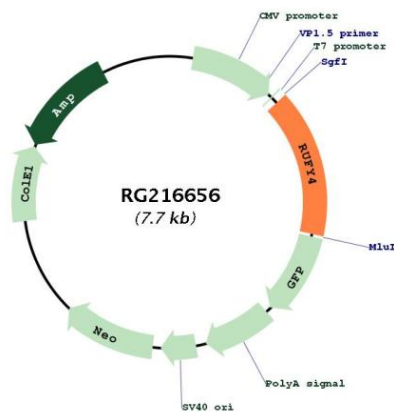
Locus ID: 285180

UniProt ID: [Q6ZNE9](#)

Cytogenetics: 2q35

Gene Summary: Positively regulates macroautophagy in primary dendritic cells. Increases autophagic flux, probably by stimulating both autophagosome formation and facilitating tethering with lysosomes. Binds to phosphatidylinositol 3-phosphate (PtdIns3P) through its FYVE-type zinc finger.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG216656