

Product datasheet for **MG216756**

Rufy4 (NM_001170641) Mouse Tagged ORF Clone

Product data:

| | |
|----------------------------------|-------------------------|
| Product Type: | Expression Plasmids |
| Tag: | TurboGFP |
| Symbol: | Rufy4 |
| Synonyms: | F930048N03Rik |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



ORF Nucleotide Sequence: >MG216756 representing NM_001170641
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCCAACACGGGACCATCCTCAAGATCAGCAGGAGCCTGAAAAATGCCGTCTCTGCCATCCTCCAGG
 GATATGGGGACGGGACAGGAGCCAGTGACAGACACCAGCGCTGAGCTACACAGACTCTGTGGCTGCCTGGA
 GCTGCTACTGCAGTTTATCAGAAAAGAGCAGAGGAGCTTCTGGGGCCCGGAAGGATTACTGGGACTTC
 CTATTCAGTCCCTTCGACGGCACCGGGGATACACAGAGCAGATGAGCTTCATATGCTCACAGGACAAGC
 TGAAGACCTCACTAGGAAAAGCCGTGCCTTTATCCGACTCTGCCCTGCCCGAGGCCAGCTGGTGAGTC
 GATGCAGCTGTGCCTCCTGAACCCACAACCTCACCAGGGAATGGTATGGCCCTCGGAGCCCTGTGTGTGC
 CCTGAGCTCCAGGAAGACATCTTGACTCTCTATGCCCTCAATGGAGTTGCCCTCAACTTGACCTGC
 AGCGGCCAGACCTGGATGAAGCCTGGCCATGTTCTCAGAGTCCCCTGTTCCAGTCCAGCCGGACCGG
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 GAACAGACTGGAGGAACAGCTGTCTGCAGGATGCAACAGAGAAGACCGCACACTGACCTCTGTA
 AACCTTGACCAAGCATCTTCCACCTTTCTGGAAGAGAAGAGGGGAGGATCCAGAAGCCTCAGTTG
 TCCCCAGAGCACTGGGAAACAGAAAGGAAGGATTCAGCTAGACCAGAAGGATGGAGGCCAAAGGCC
 AGGAAATTCCTGGAAAACCTAACAGCCAGCATCCAGCAACAGAGGAGCAGGGCTAAGGATGTTAAATGC
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 GATCCAGAAAAGGGCAGCAGATTGGGACCTTGCCAGGGGCTGATGGCCCCGGTCTTCAGGGAAGAGAA
 GATGCAGAGTTAGGATACAGGTGTGAGTGGAAATCAGCCTGATGTTCTCAGGCAATCCTGGGTCTGGGAA
 CAAAGAAAAGTTCACACAGAGAAGCCACAAGAGTGGACAGGAGTGACCAGTGAACCATGCAGGAGGA
 TGGGTGAGAAGTGCCCTTGCAGCAGGAGGTGATCAAGGACCCTGGGTATGGGCTCCAGCTGGCAAAGGAA
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 CGCCATGTATCAGACAGAGCTTGAAGGGCAGAGGGACCTGGTCCAGGCCATGAAAAGGAGGGTGTGGAA
 CTGATCCATGAGAAGGACCTTCAGTGGCAGAGACTCCAGCAGCTGTCTACTGTGCCCTGGACACTGCA
 TAGGCTGCAACAAGGTCTTCAGGCGTCTGTCTCGGCGGTATCCTTGCAGGCTCTGTGGAGGCTGGTTT
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 CAGGACACC

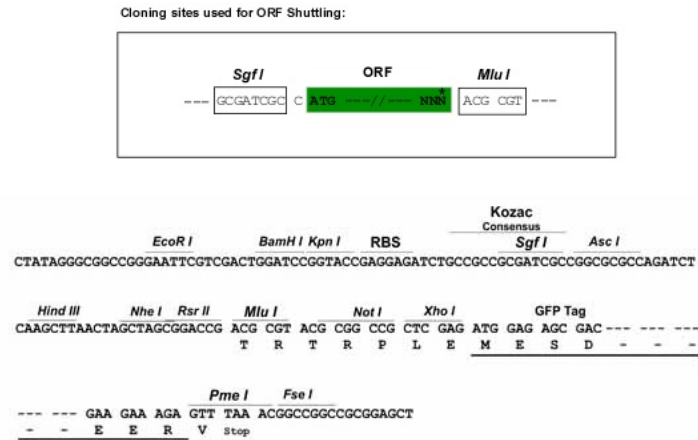
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG216756 representing NM_001170641
 Red=Cloning site Green=Tags(s)

MANNGTILKISRSLKNAVSAAILQGYGDGQEPVTDTSaelHRLCGLELLLQFDQKEQRSFLGARKDYWDF
 LFTALRRHRGYTEQMSFICSQDKLKTSLGKGRAFIRLCLARGQLAESMQLCLLNPQLTREWYGPRSPLLC
 PELQEDILDSLIALNGVAFNLDLQRPDLDEAWPMFSESRCSSPRTGKRRPGKPKGFPEEVRCRGEQLQ
 EPDTGGTSCLQDATREDRTPDLCKPLQPSHLPTFLEEKREDSRSLSCPQSTWETEREGFLDQKDGPKP
 RKFLNSTASIQQRRAKDVKMQLTGRKVEGKGLSGTEDQRTTEGIQKRAADWDLGQGLMAPGLQGRE
 DAELGYRCEWNQPDVLRQSWVLGTTKSSPTEKPQEWTVTSGTMQEDGSEVPLQQEVIKDPGYGLQLAKE
 QAQCQQLRAQEAELQALQEQLSRCQKERALLQVKLEQKQEAERRDAMYQTELEGQRDLVQAMKRRVLE
 LIHEKDLQWQRLQQLSTVAPGHCIGCNKVFRRLSRRYPCRLCGGLVCHACSVDYKKRERCCPTCAQQEEI
 QDT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:


ACCN: NM_001170641

ORF Size: 1689 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_001170641.1](#), [NP_001164112.1](#)

RefSeq Size: 2336 bp

RefSeq ORF: 1692 bp

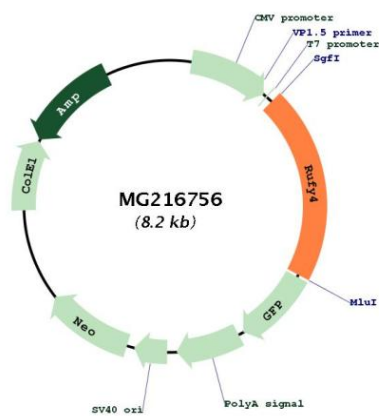
Locus ID: 435626

UniProt ID: [Q3TYX8](#)

Cytogenetics: 1 C3

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 MG216756