

## Product datasheet for **MR216756**

### Rufy4 (NM\_001170641) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rufy4 (NM_001170641) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rufy4
Synonyms:	F930048N03Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR216756 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCAACAACGGGACCATCCTCAAGATCAGCAGGAGCCTGAAAAATGCCGTCTCTGCCATCCTCCAGG  
 GATATGGGGACGGGCAGGAGCCAGTGACAGACACCAGCGCTGAGCTACACAGACTCTGTGGCTGCCTGGA  
 GCTGCTACTGCAGTTTGATCAGAAAGAGCAGAGGAGCTTCTGGGGGCCGGAAGGATTACTGGGACTTC  
 CTATTCAGTGCCTTCGACGGCACCCGGGATACACAGAGCAGATGAGCTTCATATGCTCACAGGACAAGC  
 TGAAGACCTCACTAGGAAAAGGCCGTGCCTTTATCCGACTCTGCCTTGCCGAGGCCAGCTGGCTGAGTC  
 GATGCAGCTGTGCCTCCTGAACCCACAACCTCACCAGGGAATGGTATGGCCCTCGGAGCCCTCTGTTGTGC  
 CCTGAGCTCCAGGAAGACATCTGGACTCTCTATGCCCTCAATGGAGTTGCCTTCAACTTGGACCTGC  
 AGCGGCCAGACCTGGATGAAGCCTGGCCATGTTCTCAGAGTCCCCTGTTCCAGTCCCAGCCGGACCGG  
 GAAAAGAAGACCCGGGAAACCCAAAGGTTTTCCAGAGGAGGTGAGATGCTCCAGGGGAGAGCAGCTGCAG  
 GAACCAGACACTGGAGGAACAGCTGTCTGCAGGATGCAACCAGAGAAGACCCGCACACCTGACCTCTGTA  
 AACCTTGCAGCCAAGCCATCTTCCCACCTTCTGGAAGAGAAGAGGGAGGATCCAGAAGCCTCAGTTG  
 TCCCCAGAGCACTTGGGAAAACAGAAAGGGAAGGATTTAGCTAGACCAGAAGGATGGAGGCCAAAGCCC  
 AGGAAATTCCTGGAAAACCAACAGCCAGCATCCAGCAACAGAGGAGCAGGGCTAAGGATGTTAAAAATGC  
 AGCTGACAGGAAGGAAAGTTGAAGGAAAAGGAAGTCTGTGGGGCAGAGAAGATCAGAGAACAACAGAAGG  
 GATCCAGAAAAGGGCAGCAGATTGGGACCTTGGCCAGGGGCTGATGGCCCCGGTCTTCAGGGAAGAGAA  
 GATGCAGAGTTAGGATACAGGTGTGAGTGAATCAGCCTGATGTTCTCAGGCAATCCTGGTCTCTGGGAA  
 CAAAGAAAAGTTCTCCACAGAGAAGCCACAAGAGTGGACAGGAGTGACCAGTGGAAACCTGCAGGAGGA  
 TGGGTGAGAAGTCCCTTGCAGCAGGAGGTGATCAAGGACCCTGGGTATGGGCTCCAGCTGGCAAAGGAA  
 CAGGCCAGTGCAGGAGCAGCTGCGGGCACAGGAAGCAGAACTTCAGGCCTCCAGGAGCAGCTCAGCA  
 GGTGTCAAAAAGAAAGAGCCCTGTTGCAAGTGAAGCTGGAGCAGAAGCAGCAGGAGGCTGAGAGGAGGGA  
 CGCCATGTATCAGACAGAGCTTGAAGGGCAGAGGGACCTGGTCCAGGCCATGAAAAGGAGGGTGTGGAA  
 CTGATCCATGAGAAGGACCTTCAGTGGCAGAGACTCCAGCAGCTGTCTACTGTGGCCCTGGACTGCA  
 TAGGCTGCAACAAGGTCTTCAGGCGTCTGTCTCGGCGGTATCCTTGCAGGCTCTGTGGAGGCTGGTTTG  
 CCACGCTGCTCTGTAGACTACAAGAAGAGAGCGTTGCTGCCAACCTGTGCCAGCAGGAAGAAATC  
 CAGGACACC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR216756 protein sequence  
 Red=Cloning site Green=Tags(s)

MANNGTILKISRSLKNAVSAILQGYGDGQEPVTDTSaelHRLCGCLELLLQFDQKEQRSFLGARKDYWDF  
 LFTALRRHRGYTEQMSFICSQDKLKTSLGKGRAFIRLCLARGQLAESMQLCLLNPQLTREWYGPRSPLLC  
 PELQEDILDLSLYALNGVAFNLDLQRPDLDEAWPMFSESRCSSPSRTGKRRPGKPKGFPEEVRCSRGEQLQ  
 EPDTGGTSCLDATREDRTPDLCKPLQPSHLPTFLEEKREDSRSLSCPQSTWETEREQFQLDQKDGPKP  
 RKFLENSTASIQQRSRAKDVQMQLTGRKVEGKGSLSGTEDQRTTEGIQKRAADWDLGQGLMAPLQGRE  
 DAELGYRCEWNQPDVLRQSWVLGTTKSSPTEKPQEWTVTSGTMQEDGSEVPLQQEVIKDPGYGLQLAKE  
 QAQCQEQLRAQEAEALQALQEQLSRCQKERALLQVKLEQKQEAERRDAMYQTELEGQRDLVQAMKRRVLE  
 LIHEKDLQWRLQQLSTVAPGHICGNKVFRRLSRRYPCRLCGGLVCHACSVDYKKRERCCPTCAQQEEI  
 QDT

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001170641

**ORF Size:** 1692 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\\_001170641.1](#), [NP\\_001164112.1](#)

**RefSeq Size:** 2336 bp

**RefSeq ORF:** 1692 bp

**Locus ID:** 435626

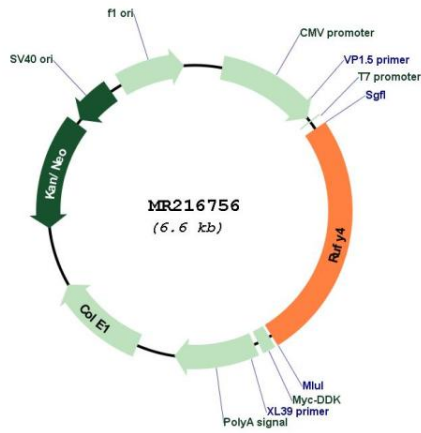
**UniProt ID:** [Q3TYX8](#)

**Cytogenetics:** 1 C3

MW: 64 kDa

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 MR216756