

## Product datasheet for **MR230833**

### Rufy3 (NM\_001289774) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rufy3 (NM_001289774) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rufy3
Synonyms:	2810428M05Rik; 6330416M07Rik; AW455998; AW538594; D5Bwg0860e; Ripx; Rpipx
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR230833 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCAGAGTCGCCGGCGCCCGGCGCGGCTGCTGAAAGTTGCGGCGAAGAGCAGGAGAGGGGCGGGGAGC  
 GCGCCCCCTCCGAGCCGCTGGAACCGCGCGGTGCTAGCGCCCGCGCGCGGACCCGGGAGGACGAGGCGGG  
 GCCCTCGGAGCCGGACTCGCCGGTGCCGCCCCCTTCTTCTCCTCTACCCGGGCGATGGAGGCGCGGGC  
 TTCACAGCGCGCCGCCACCGCAGCGCGCTGGAGGACCCCGCGCTCGCCGGCTCCCGCTGCCCTTCC  
 TGCTGCTGAGCTACCCGAGCGCGGCGAGCGGCGGAGGCAAGCACCATCCCAATTATCTCATGGCTAA  
 CGAACGCATGAACCTGATGAACATGGCAAAGCTGAGCATCAAGGGCTTGATTGAATCGGCTCTGAATCTG  
 GGGCGGACCCTGGACTCTGACTACGCACCTCTCCAGCAGTTTTTCGTGGTATGGAACACTGCCTGAAAC  
 ACGGCTTGAAAGCAAGAAAACCTTTCTTGACAAAATAAATCCTTCTGGGGCCTCTAGAGCTGGTGGA  
 GAAGCTTGTTCCAGAAGCTGCAGAAATAACAGCGAGTGTAAAAGACCTCCAGGACTCAAGACACCAGTT  
 GGCAGAGGAAGAGCCTGGCTTCGGTTGGCATTGATGCAAAAAGAAGCTTTCTGAGTATATGAAAGCCTTGA  
 TCAATAAGAAGGAACCTTCTCAGTGAGTTCTATGAAGTCAATGCCCTCATGATGGAAGAAGAGGAGCTAT  
 TATCGCTGGTCTCCTGGTGGTCTGAATGTCTATCGATGCCAATTTCTGCATGAAAGGAGAAGACCTGGAC  
 TCTCAGTTGGAGTTATAGATTTTTCGATGTATCTCAAAGATGGAACAGTAGTAAAGGTAGTGAAGGGG  
 ATGGACAGATTACTGCGATCCTAGACCAGAAGAACTATGTAGAAGAACTCAACAGACATCTGAATGCAAC  
 TGTAACAACCTTCAGACAAAAGTAGATCTGTTAGAAAAATCCAACACTAAATTGACAGAAGAACTTGCC  
 GTTGCCAAACAAGAATTATTACCTTACAAGAAGAAATGGAACGAGTTAAAGAAGAAAGCTCCTATCTAC  
 TGGAAATCCAATCGGAAGGGTCTTAAACAAGACAGAACTGCAGAAGGGCAAGCGCTGAGCGAAGCCAGAAA  
 GCATCTAAAGGAGGAGACACAGTTAAGATTGGATGTCGAGAAGGAGCTGGAGCTGCAGATCAGCATGAGG  
 CAGGAGATGGAAGTGGCTATGAAGATGCTGGAGAAGGATGTCTGTGAGAAGCAGGATGCCCTGGTGTCTC  
 TGCGGCAGCAGCTGGACGATCTCCGGGCTCTTAAGCATGAGCTCGCCTTAAACTGCAGAGTTTACAGCT  
 AGGAGTGAACAGAAAAGTGAATTAACAGTCTGCTTGAAGAAAAGACCAATCAGATGGCTGCCACCATT  
 AAACAGCTGGAGCAAAGATTGCGCCAGGCTGAGCGAGGCCCGCAGTCTGCTGAGCTGGACAACCGGCTCT  
 TCAAACAGGACTTTGGAGACAAGATCAACAGTCTGCAGCTGGAAGTGGAGGCGCTCACCAGGCGAGCGGAC  
 TCAGCTGGAGTTAGAAGTGAACAAGAAAAGGAGAGGAAGTCAAAAACAGGGGCACCCAGGGAAGGGG  
 GCCCAGAAGCCAGAGCTGCGCATGGATGGGAAGCACAGAATCCAAGAGGAAAACGTTAAACTAAAGAAGC  
 CGCTGGAAGAAAGCCACAGGCTTCTGACTACCCCTGCAGAGGAACAGGGTCAGCCTTCGCTCTGAAAA  
 GCCACAGGTGTGTGAGCTGTGCCAGGAAGACGACAGCCTGACAAAAGAACGTTGTAAGAACTGCAGAGGA  
 ACCTTCTGTAACGCTGCACAACAAATGAACTGCCTTCCGTCGTAAGCATCAAGCCTGAGCGAGTGTGCA  
 ATCCTTGTACAGCAGCTGATAAAGCAGTACTCCAGCAGCCACCC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR230833 protein sequence  
 Red=Cloning site Green=Tags(s)

MAESPAPGAAAESCQEEQERGGERRPSEPLEPRGASARGADREDEAGPSEPDPVAAPFFLLYPGDGGAG  
 FTARPPPQRAWRTPPSPGSPLPFLLLSYPSGGSGGGKHHPNYLMANERMNLMNAKLSIKGLIESALNL  
 GRTLDSYAPLQQFFVMEHCLKHGLKAKKTFLLGQNKSFWGPLELVEKLVPEAAEITASVKDLPGLKTPV  
 GRGRAWLRALMQKKLSEYMKALINKKELLSEFYEVNALMMEEEGAIAGLLVGLNVIDANFCMKGEDLD  
 SQVGVIDFSMYLKDGNSSKSGSEGDQITAILDQKNYVEELNRHLNATVNNLQTKVDLLEKSNTKLTEELA  
 VANNRIITLQEEMERVKEESSYLLESNRKGPQDRTAEGQALSEARKHLKEETQLRLDVEKELELQISMR  
 QEMELAMKMLEKDVCEKQDALVSLRQQLDDLRAKHELAFKLSDDLGVKQKSELNSRLEEKTNQMAATI  
 KQLEQLRQAERGRQSAELDNRLFQDFGDKINSLQLEVEALTRQRTQLELELKQEKERKSQNRGTPGKG  
 AQKPELRMDGKHRIQEENVLKKPLEESHRLTHPAEEQGQPSLSEKPVQCQLCEDDSLTKNTRCRNCRG  
 TFCNACTTNELPLPSSIKPERVCNPCHEQLIKQYSSSPP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_001289774

**ORF Size:** 2007 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\\_001289774.1](#), [NP\\_001276703.1](#)

**RefSeq Size:** 3561 bp

**RefSeq ORF:** 2010 bp

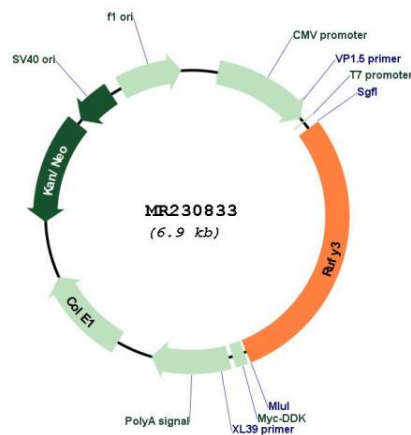
**Locus ID:** 52822

**Cytogenetics:** 5 43.77 cM

**MW:** 74.8 kDa

**Gene Summary:** Plays a role in the generation of neuronal polarity formation and axon growth (PubMed:24720729). Implicated in the formation of a single axon by developing neurons (PubMed:24720729). May inhibit the formation of additional axons by inhibition of PI3K in minor neuronal processes (By similarity). Plays a role in the formation of F-actin-enriched protrusive structures at the cell periphery (By similarity). Plays a role in cytoskeletal organization by regulating the subcellular localization of FSCN1 and DBN1 at axonal growth cones (PubMed:24720729). Promotes gastric cancer cell migration and invasion in a PAK1-dependent manner (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR230833