

## Product datasheet for **MG221158**

### **Rin3 (NM\_177620) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Rin3 (NM_177620) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rin3
Synonyms:	6430500K07; C86933
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG221158 representing NM\_177620  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCGACGCGCCGAAGCGCCCTCGAGCGCCACCCTGCCGGTCTATTCCAGATGCTGGCAAAGGAGAGG  
 GAGAGGAAGATGAGGAGAAAGACGGCACGAGGCTTGGTCTGTCAACCACCCGAGGAACTGCATCCACG  
 CCGGGGCATCAGTGTCTGGAGAAGCTGGTGAAGACCTGCCCTGTGTGGTGCAGCTAGGGCTAGGCCAG  
 GCAGAGGCTGCCAAGATCCTGCAGCAGGAGATGGCTGGGATGTTCTGGTGTGCCGGGACAACAACCTGA  
 AGCAATTGGTGTGTGTCCACTTCCCTTCCCTGAAGGGCAGCTCAGCTGAGGTGCTGGAGTACCCCAT  
 CAAAGAAGAAAAGGCTATACTGTACCTGGAAGGCTCAGTCTTGTGTTTGAGGACATCTTCAGACTGATT  
 GCGTTCTACTGTGCAGTAGAGACTTACTGCCCTTCACTCTACGGCTGCCACAGCCATCCTCGAAGCTA  
 GCAGCTTCTTGAAGTTCAGACCATCTCAACCTGGGCTGGGTTTCTGGGACTCCTCGTGAACCTAAG  
 AGGCTCTGCAGAGCCACTCAGAAGCCAGCCCTGGGACCCTGCATCCTCCAGCTCCGGCCTACAACC  
 CATTACGCAAATTGTTCCCTGTGAAATCGAGCTCTCCGTGGGAAATGACCCGCTGTGGTTTGTGAATCCTA  
 TTTTCATCGAGGACTGCATCCTACCGGCTGATCCACCTCCACTGCCTACTGGCAGCTACCCCTCCACGCC  
 TACGCCTGCCACCCCGGATGCTACCTCACCCACCTCCAAGGGATCCCCACGTGCCCCCACCTCCACCC  
 CCGTTACCCACTGTTCTCCTACTGGCCCTGCACGGCCTCTTGCGCCCTGTACCGCTGCTGGCCCTT  
 TGCCCAACTCCCCCTAACGCCACCTCTACCTTGCACCCATGCACGGGGCCCCCTGGCCACTCAA  
 CCAACCACCATGACAGCCTGCGAGAGTCTCCCTCGCCAGCTGTAGGCTGGGCCCTTTGGAGAAGAA  
 GAGATGAAACCTGGGACAACCTCCAATCCCTTGACCAAGCCCTCCCCCTCCATTACCCCTGAAGAAGG  
 CTTCTCCAGCAGCCCTCCAGGAGGCGCATTCTGAGAGGGTATCTCTGGAAAGCCAGAATGTGGGGAG  
 TTCAACAGACAGGGACCACTCAGGCATTTCTAGGACAGCATCACTCAACCTTCTCCCCAGAGCACCGTA  
 AGTAGCCTTGGGACAGGCTCCAAGGACCACGGAGCAAAGCCAGGACACAGAGGCCAAAGCCAGCCATG  
 CTGACAGCATACCAGTGCCTCCTGGGAAGGCCAAACAACCCCAAGTACCACCCCAAGGAAGAAGCGGT  
 CTCCCGGAGCTGGCCTCAACCTTCTCAGTCCCTTGGAGAGCCCATACAGGAGGCATCCTCTGAGAAA  
 CAGGCGACTGGTGCATCTTGGGAAGGCTTGTGCTGTCCGGCAAGCTGGCATGCAGCACCTCAAGTTC  
 AGTCCAGCAGCTGTCCCCAAGCTCTCCAGAGTCAAGGGTCCAGGCCTCACTCTCAGACAGCCTGGG  
 GGTGCCTGCCTCGCCGCTGACCAGGACTCCTACTCAACCAGCAGTGCAGAGGAGGAGCTGGAGTTCAGC  
 AGCCCCAAGTGAAGAAGAAACCTCAATGATCCTGGACAAGGCCGCCACCGCCTCAGTTCGTACGCT  
 TGCCAGCGTCTCCATGCCTTCTCTCCAGCAGCCGAAACTGTATAAGAAGGTGGTGGAGCTGGCACA  
 GGACAAGAGCTCCTACTTCGGCAGCCTGGTGCAGGACTACAAGGTGTACAGCCTGGAGATGATGGCCCGC  
 CAGACATCCAGCACTGAGATGCTGCAGGAGATCCGTACCATGATGACCCAGCTCAAGAGCTACCTGCTAC  
 AGAGCACTGAACTCAAAGCCTTGGTGGAAACCCACCTGCACTCGGAGGAGGAACTCGAGGCCATAGTGG  
 GTCAGCCTTGTACAAGTGTGCTTGAAGCCCTGAAGGAGGCCATCAACTCCAGCCTGCTGGAGATCCAC  
 AGCCGGGATGGCTCACTGCAGCAGCTCAAGGAGAACCAGTGTGGTCTGGCCACCACCACCACCGACC  
 TGGGTGTGACCACCAGCGTGCCTGAGGTGGCTGTATGGAGAAGATCCTGCAGAAGCTGACCAGCATGCA  
 CAAAGCCTACTCACCAGGGAAGAAAATCTCCATCTTGTGTAAGACCTGCAAGCTCATATGACTCCATG  
 GCTCTTGGCAACCCAGGGAAGCCCTACGGGCGGACGACTTCTGCCTGTGCTCATGTACGTGCTGGCCC  
 GCAGCAACCTCACTGAGATGCTCCTCAACGTGGAGTACATGATGGAGCTCATGGACCCCGCCCTGCAGT  
 AGGAGAGGGTCTACTACTCTGACCACCACCTACGGAGCCCTGGAGCACATTAATAACTATGACAAGATC  
 ACAGTGACCCGACAGCTGAGCGTGGAGGTGCAGGACTCCATCCATCGCTGGGAACGCAGGCGCACGCTCA  
 ACAAGCGCGGGCTCCCGCTCCTGTGCAGGACTTCACTGTGTGCTCCTACCTGAAGCCCGAGCAGCA  
 GTCACGGACACTGGCGTACGGGCAGACACAGCAGCCAGGCACTGTGTGCACAGTGCCTGAGAAGTTT  
 GAGGTGTACAGCCCAAGACTACCGGCTTCTCGTGTGGTGGACGGGCGCTGCTCCAGCTGGCCGACG  
 AGGCTCTGCCGATCGCATCAAGGGTATCTGCTTCCGAGCGAGCCAAACGAGACTTCCACTTCGTGTA  
 CCGGCCCCAGGACAGCGCAAGGATGCTTCAAGCCAGCCCTGTATAGTAGTGCGGGAACCCAACTCCTA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG221158 representing NM\_177620  
 Red=Cloning site Green=Tags(s)

MRRAEAPSSAHPAGPIPDAKGEGEEDKDGTRLGLSTTPRNCIPRRGISVLEKLVKTCPVWLQLGLGQ  
 AEAAILQQEMAGMFLVCRDNNLKQLVLCVHFPSLKGSSAEVLEYPIKEEKAILYLEGSLVLFEDIFRLI  
 AFYCVSRDLLPFTLRLPQAILEASSFLELETISNLGLGFWDSSLNSRGSAPLRSAPGTPASSSLRPTT  
 HYANCSCIEELSVGNDRLWFVNPFI FIEDCILPADPPPLPTGSPYPRPTPATPDATSPTS KGSPPRRPPPP  
 PLPTVPPTGPARPLAPPVPPAGPLPNSPLTPTSHLAPHAGPPGHSNQPPMTACESLPRPAVGLGPFGE  
 EMKPGTTPNPLHQAPPPPLPKKALPAAPRRRISERVLESQNVGTSTDRDHSGISRTASLNLPPQSTV  
 SSLGDRPRTTEQSQDTEAKASHADSI VPPGKAKQPPVPPRKRVSRLASTLLSPLESPIQEASSEK  
 QATGASWEGLSPVYRQAGMQHLVQSSSCPQSSPEFKGSQASLSDSLGVPASAADQDSYSTSSAEELFS  
 SPNVKKKPSMILDKARHLSFVSFASVFHAFSSDRKLYKKVVELAQDKSSYFGSLVQDYKVYSLEMMAR  
 QTSSTEMLQEIRTMMLTQLKSYLLQSTELKALVEPTLHSEEELEAIVESALYKCVLKPLKEAINSSLLEIH  
 SRDGLSQQLENQLVVLATTTDLGVTT SVPEVAVMEKILQKLTSMHKAYSPGKKISILLKTCKLIYDSM  
 ALGNPGKPYGADDFLPVLMYVLARSNLTEMLLNVEYMMELMDPALQLGEGSYLLTTYGALEHIKNYDKI  
 TVTRQLSVEVQDSIHRWERRRTL NKARASRSSVQDFICVSYLKPEQQSRTLASRADTAAQALCAQCAEK  
 EVSQPDYRLFVLVDGRCFQLADEALPHRIKGYLLRSEPKRDFHFVYRPQDSGKDASSQPCIVVREPNFL

TRTRPLE - GFP Tag - V

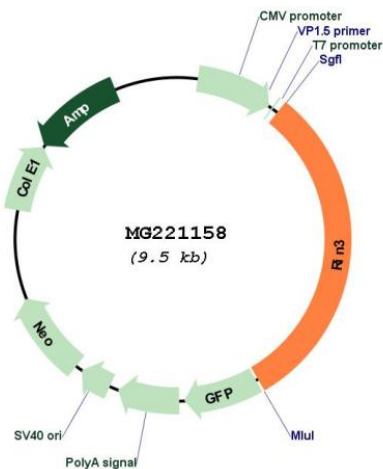
Restriction Sites:

SgfI-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_177620

ORF Size: 2940 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_177620.4](#), [NP\\_808288.2](#)

RefSeq Size: 3880 bp

RefSeq ORF: 2943 bp

Locus ID: 217835

UniProt ID: [P59729](#)

Cytogenetics: 12 E

Gene Summary: Ras effector protein that functions as a guanine nucleotide exchange (GEF) for RAB5B and RAB31, by exchanging bound GDP for free GTP. Required for normal RAB31 function (By similarity).[UniProtKB/Swiss-Prot Function]