

## Product datasheet for **MG219463**

### Rapgef1 (NM\_054050) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rapgef1 (NM\_054050) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Rapgef1  
**Synonyms:** 4932418O06Rik; C3G; Grf2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG219463 representing NM\_054050  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAGCAGCGCCTCGGCCCTCCGGCGCAGCCCGGAAATGTCCGGCAAGATCGAGAAAGCAGACTCTCAGC  
 GTTCTCATCTCTCTCTCCTCCTCACCATGAAGCTGATGGACAAATCCACTCTCCCAAATCAAGAGAACC  
 ATCCAAGAAGGGAAAGCCAGCCGAGGTGTGAAGATTCTGAGAAGCCTGTGAGCAAAGAGGCAAGAGAC  
 AGATTTCTACCAGAGGGTACCCTATCCCCTTGGATCTGGAGCAGCAGGCAGTAGAATTTATGTCCACCA  
 GTGCTGTGGCTTCCAGGTCTCAGAGGCAGAAGAACCTGTGCTGGCTGGAGGAGAAAGAGAAGGAGTTGT  
 CAGTGCCTTGGCTACTTTAAGACCATTGTGGACAAAATGGCCATTGATAAGAAGTTCTGGAGATGCTC  
 CCGGGGTGAGCCAGCAAGGTGCTGGAGGCCATTTACCCCTGGTGCAGACTGACCCTCGGATCCAGCACA  
 GCTCAGCCCTCTCCTCTGTTATAGCCGAGTATACCAGAGCCTCGCCAACCTTATCCGATGGTCTGACCA  
 GGTGATGCTAGAGGGCGTGAAGTGAAGATAAGGAGATGGTGACAAGTGTGAAGGGCGTTATCAAAGCT  
 GTCCTGGACGGAGTGAAGGAGCTAGTGAGGTAACCATGAGAAGCAGGGGCGCCATCGCCAACAAGCC  
 CAGTGAAGCCAGTTCAGCCAGCAAGCCTGATGGCCAGCCTGAGCTCCCTCTGACAGACCGAGAAT  
 GGAGATTCTGAACAAGACGACAAGTGTGCACCATCTGCTGAAGTGTCCAGACTCCACCAGTGAAGAG  
 GTCGACCCCAAGCCCTTTACCTGGCATCCGGGTGGTTGATAACAGTCCACCAGATTACCACCA  
 AGAAAAGGCAGTCTGCTCCATCCCCACTCGGGTGGCTGTGGTAGCCCAATGAGTCGGGTACCAGTGG  
 CTCCAGTTTGCCTGTTGGAATCAATAGGCAGGACTTTGATGTTGAATGTTACACCAGAGGCGCCTGTCA  
 GGAGGCAGCCGCTCCTGCGGTGGTGAAGTCTCCTCGCTGTCCCTGCGAGCAGCAGGCAAGCTCAGCC  
 GCTCAGACGAGCAGTGTCTCCTGGACAGGGATAGTGGGAGTGTCTACGGAACACAAGCTGTGAAAC  
 ACTAGATCACTACGACCCGACTATGAATTCCTCCAGCAAGATCTCTCAATGCAGACCAGATCCCTCCA  
 CAGGCAGCCTGTAACCTCAGCCCTCTGCCGAGTCCCTGGGGAACTCTGGCCTCCATTTCTTGGCCACC  
 CTTTCCAGCTGCCTTTGGGAGCTGTCTGAGCAGGAGGACAGCAGACAGACTCCACCTGCCCTTCC  
 GGAGAAGAAGCGTAGGAGCGAGTCTCCAGACCAGGACAGCTCTGGTGCAGGTTGCTCTATGAGCGA



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CACCCCTCACAGTATGACAACATCTCAGAGGGTGACCTGCAGAACCCAGTCCCAGTCCAGCCTGTGCCCT  
 ACCCACCCTTTGCTGCTGTCTGCCCTTTCAGCAGGGAGCTTCTCTGCCTCTGCTGAGTTTGTGGGTGA  
 TTTTCAGTGTCTGAGTTGGCGGGTGACACAGAGAAGCCACCTCTCTACCAGAGAAGAAGAACAAGCAC  
 ATGCTGGCCTACATGCAACTGCTGGAGGACTACTCAGAGCCACAGCCCTCCATGTTCTACCAGACACCGC  
 AGAGTGAGCACATCTACCAGCAGAAGAACAAGATGCTCATGGAGGTGTACGGCTTACGCGAGTCTTCTG  
 CGGTAGTGATTCCACGCAGGAGCTGGCCCTCCACCCGCTCTGCCCCCAAGCAACGCGAGCTGGAACCA  
 CCATCTGGGAAGGACGGACATCCAGAGATCCTTCGGTCAGCAGTGCATCTGGGAAGGACAGACAGAA  
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 AGGCCAGGAACCTTGCATGATTTCCACAGCCACGAGATAGCTGAGCAGCTGACACTGCTGGATGCCGAGC  
 TTTTCTACAAGATAGAGATTCTGAAGTTTGGCTTTGGGCCAAAGAGCAGAATGAGGAGAAGAGTCCCAA  
 TCTGACCCAGTTCACAGAGCACTTCAACAACATGTCTACTGGGTGCGGTCCATCATGCTGCAGGAG  
 AAGGCCAGGACCGGGAGAGGCTGCTCCTCAAGTTCATCAAGATCATGAAGCACCTGCGCAAGCTCAACA  
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 GCAGACCTCAGAGGGCTGGCTGAGTACTGCACATTGATTGACAGCTCATCTCCTTCCGAGCCTACCGG  
 GCTGCTCTCTCAGAGGTGGAGCCCCATGTATCCCATACCTAGGTCTGATTCTGCAAGACCTGACCTTCG  
 TTCACCTGGGAAACCCAGATTATATTGACGGGAAAGTAACTTCTCCAAGCGGTGGCAACAGTTCAACAT  
 ATTGGACAGCATGCGGTGCTTCCAGCAGCGCACTATGAAATCCGGAGA AACGACGACATCAATAAATTC  
 TTCAATGACTTCACTGACCACCTGGCCGAGGAAGCCCTGTGGAACTCTCTCTGAAGATCAAGCCTAGGA  
 ACATAACAAGGCGGAAAACAGACCCGGAAGAGAAGACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG219463 representing NM\_054050  
 Red=Cloning site Green=Tags(s)

MSSGLGLRRSPMSGKIEKADSRSHLSSFTMKLMDKFHSPKIKRTPSKKPKPAEVSKIPEKPVSKWARD  
 RFLPEGYPIPLDLEQQAVEFMSTSAVASRSRQKQKNCWLEEKKEVVSALRYFKTIVDKMAIDKKVLEML  
 PGSASKVLEAILPLVQDTPRIQHSSALSSCYSRVYQSLANLIRWSDQVMLEGVNSEDKEMVTTVKGVKA  
 VLDGVKELVRLTIEKQGRPSPTSPVKPSPASKPDGQPELPLTDREMEILNKTTSPVSAELLPDSTSEE  
 VAPPKPLPGIRVVDNSPPALPPKKRQSAPSPTRVAVVAPMSRATSGSSLVPGINRQDFDVECYTQRRLS  
 GGSRS CGGESPRLSPCSSTGKLSRSDEQLSSLD RDSGQCSRNTSCETLDHYDPDYEFLLQQLSNADQIPP  
 QAACNLSPLPESLGE SGPPFLGHFQLPLGSLQQEGQQTDTPPALPEKKRRSAVSQTDSGCRVSYER  
 HPSQYDNI SEGDLQNPVPVQVPPYPPFAAVLPPFQQGASSASAEFVGDFVPELAGDTEKPPPLPEKKNKH  
 MLAYMQLLEDYSEPQPSMFYQTPQSEHIYQKKNKMLMEVYGFSEFSGSDSTQELAPPPALPPKQRQLEP  
 PSGKDGHPRDPVSASSAGKDSRENGERSPKSLDGLESAQSEEEVDEL SLIDHNEIMARLTLKQEGDDGPD  
 VRGGSGDILLVHATETDRKDLVLYCEAFLTTYRTFISPEELIKKLQRYRYEKFSPFADTFKKRVSKNTFFV  
 LVRVDELCLVELTEEILKLLMELVFRLVCSGELSLARVLRKNILDKVDQKLLRCAHSQPLAARGVAA  
 RPGTLHDFHSHEIAEQLTLLDAELFYKIEIPEVLLWAKEQNEEKSPNLTOFTEHFNMSYVWRSIIMLQE  
 KAQDRERLLKFIKIMKHLRKLNNFNYSYLAILSALDSAPIRRELEWQRQTSEGLAEYCTLIDSSSSFRAYR  
 AALSEVEPPCIPYLLGLILQDLTFVHLGNPDYIDGKVNFSKRWQQFNILDSMRCFQQAHYEIRRNDIINF  
 FNDFSDHLAEEALWELSLKIKPRNITRRKTDREKT

TRTRPLE - GFP Tag - V

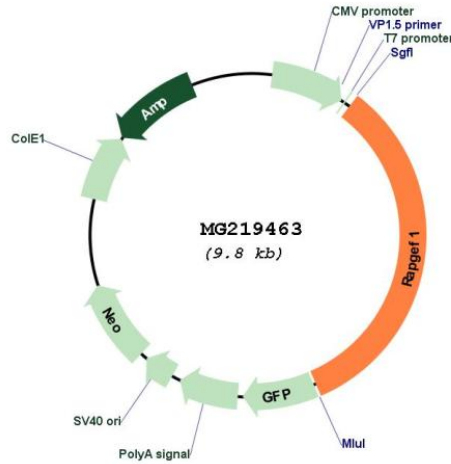
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_054050

ORF Size: 3258 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_054050.2</a></u> , <u><a href="#">NP_473391.1</a></u>
<b>RefSeq Size:</b>	5837 bp
<b>RefSeq ORF:</b>	3261 bp
<b>Locus ID:</b>	107746
<b>Cytogenetics:</b>	2 20.32 cM