

## Product datasheet for **MG224849**

### Rasgrf1 (NM\_011245) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rasgrf1 (NM_011245) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rasgrf1
Synonyms:	AI844718; CDC25; CDC25Mm; Gnnp; Grf1; Grfbeta; p190; P190-A; p190RhoGEF; Ras-GRF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG224849 representing NM_011245 Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGGCGGCC

ATGCAGAAAGCCATCCGGCTTAACGATGGCCACGTCGTGACCCTGGGACTGCTGGCACAGAAGGACGGCA  
CGCGCAAAGGCTACCTGAGCAAGAGGAGTGGGACAACCCAAAATGGCAAACCAAGTGGTTTGCCTGCT  
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CTGTGACGAGTGGGTGGCTGCGATCGCTCGCGCCAGCTACAAGATACTGGCTACAGAACATGAGGCGCTT  
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AAGAAACCCCTATAACACACGACGACGTCAGCAGTATCTTTCTGAACAGCGAGACCATCATGTTCTCTGC  
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CATGCAGATGTCCTGTCTGAAAAGAGCAAGTCTCTAGGGGCCGCTGGGTCTCTGTCCACTAAGAAA



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GAGGGTGAGCGCCAGTGTTCCTATTCTCCAAGCATCTCATTATCTGCACCAGAGGCTCTGGTGGGAAAC  
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TCCGAGAGATTGCCAGTTTCAGCAGACTACCTACAAAATCGACCCCAAGGTAATTCAGTACTT  
ACTGGATGAATCTTTCATGTTGGACGAAGAAAGCCTGTATGAGTCTTCGCTCCTAATCGAACCAAAACTC  
CCACA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG224849 representing NM\_011245  
 Red=Cloning site Green=Tags(s)

MQKAIRLNDGHVVTLLGLLAQKDGTRKGYLSKRSADNPKWQTKWFALLQNLLFYFESDSSPRPSGLYLLEG  
 SICKRAPSPKRGTSKESGEKQQHYFTVNFSDNSQKTLELRTEDAKDCDEWVAAIARASYKILATEHEAL  
 MQKYLHLLQVVETEKTVAKQLRQLEDGEVEIERLKTEVTITNLIKDNDRIQSSNKAGSADDESDIKKI  
 KKVPQSFLRGWLCRRKWKNIIDYIRSPHADSMRKRNVVFSMLEAEAEYVQQLHILVNNFLRPLRMAASS  
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 LAHCKQNRDFDKLLKQYEAKPDCEERTLETFLTYPMFQIPRYILTLHELLAHTPHEHVERNSLDYAKSKL  
 EELSRIMHDEVSETENIRKNLAIERMITEGCEILLDTSQTFVRQGSLMQMSLSEKSKSSRGRGLGSLSTKK  
 EGERQCF LFSKHLIICTRSGGKHLTKNGVISLIDCTLLDEPENLDDEAKGAGPEIEHLEFKIGVEPKD  
 SLPFTVILVASTRQEKAAWTSDIQCVDNIRCNGLMMAFEENSKVTVPQMIKSDASLYCDDVDIRFSKT  
 MNSCKVLQIRYASVERLLERLTDLRFLSIDFLNTFLHSYRVFTNAMVVLDKLINIYRKPMSAIPARSLEL  
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 NIHSPISPFGKTTLDTGKLCMASSLPKTPEEIDVPATIEPKPGELSASRKHSSDVLKEESEDDQNHSDDED  
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 VFRRMSLANTGFSSDQRNIDKEFVIRRAATNRVLNVLRHVVTKHTQDFD TDDTLKYRVICFLEEVMHDPD  
 LLTQERKAAANIIRTLLEETTEQHSMLEEVILMTEGVKTEPFENHPALEIAEQLTLLDHLVFKSIPYEE  
 FFGQGWMAEKYERTPYIMKTTKHFNVSNFIASEIIRNEDISARASAI EKWVAVADICRCLHNNYAVLE  
 ITSSINRS AIFRLKKTWLVKSKQTKSLLDKQLVSSDGRFKNLRESLRNCDPPCVPLGMYLTDLV FIE  
 EGTPNYTEDGLVNF SKMRMISHI IREIRQFQTTYKIDPQPKVIQYLLDES FMLDEESL YESSLLIEPKL  
 PT

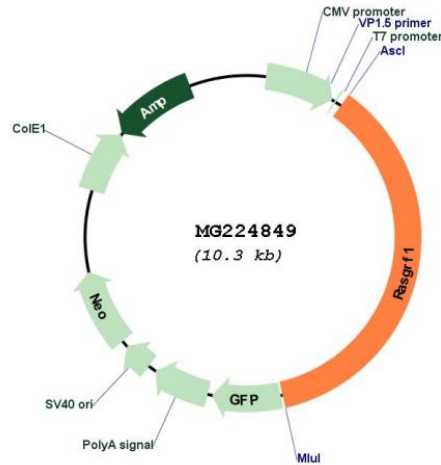
TRTRPLE - GFP Tag - V

Restriction Sites:

AscI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_011245

**ORF Size:** 3786 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\\_011245.2](#), [NP\\_035375.1](#)

RefSeq Size: 4243 bp  
RefSeq ORF: 3789 bp  
Locus ID: 19417  
UniProt ID: [P27671](#)  
Cytogenetics: 9 47.31 cM  
Gene Summary: Promotes the exchange of Ras-bound GDP by GTP.[UniProtKB/Swiss-Prot Function]