

Product datasheet for **MG225103**

Rasgrp4 (NM_145149) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rasgrp4 (NM_145149) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rasgrp4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG225103 representing NM_145149
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAACCGAAAGACATCAAAGGAAGTCTCATCAGGAATGCTCTGGAAAGCAGGAGGGCGGGTTCGGT
 CAGGTCAGGCCCGCCGCAAGACGTGCCACCCCGGAAATCAGCAAGGTCATGGCGTCCATGAA
 TCTGGGAGTGCTGAGTGAGAGCAGCTGCAGCAAGATGAGCTATTGGAGGAATGTATCCGCTGCTTTGAC
 TCGGCTGGCAGCCTGCGCCGAGGGGACCACATTCTCAAGATGGTCTCACGATGCACAGCTGGGTCTGC
 CATCCTCAGAGCTCGCTGCCGCTGCTGACTTCGTATCAGAAGGCTGCCAAAGATGCCAAGAGCTAAG
 ACAGCTACAGATCTGTTACTTGGTCAGGACTGGCTGACCCATCACCATGAGGCAGTGCACCAGGAACCC
 CAGCTGGAAGCAGTCATAAGCCGGTTTTGGACACTGTCGCTCAGGAGGGCAACATGGCCAAAGGAGCC
 TGGGAGATGCCTCCAGCCTGCTAAGTCTGGAGGGCCCGTCCCCACCTCCCATGAGCAGCCAGGCCCT
 GGGCAAGAAGCGAAAGTGTATTGCTATTCGATCACCTGGAGACAGAGGAGCTGCCACAACACCTCACT
 TACCTGGAGTTCGGTCTTTCCAGGCTATCACACCCCAAGACCTGCGGGGCTATGTTTTGCAAGGTTTCAG
 TGAGAGGTTGTCCAGCTCTGGAAGTCTGTGGGTCTGAGCAACAGTGTGTCCCGCTGGGTGCAGGTCAT
 GGTGCTGAGTCGTCTGGGCTGCACAACGTGCCAGGCTCTGGACAAATTCATTCGTGTGGCACAGAGG
 CTTACCAGCTGCAGAATTTCAACACACTGATGGCGGTACGGGGGGTCTGTGTCAAGCCATCTCCA
 GACTCAAGGACTCCCACGTTTCTGAGCCCTGACAGCACAAAGGCCCTGCTGGAGCTGACAGAGCTCCT
 CTCATCCACAACTATGCCACTACCGCCACCTGGGCCGGTGTACTGGCTTCCGGCTGCCAGTA
 CTGGGTGTGCACCTCAAGGACCTGGTATCTCTATATGAGGCTCATCCAGACAGATTGCCAGATGGCCGCC
 TGCACCTACCCAAGCTGAATAGCCTCTATCTACGGCTGCAGGAGCTGATGGCGCTCCAGGGACAGCATCC
 TCCTGCAGTGCCAATGAGGACCTGCTGCACCTGCTGACGCTCTCCCTGGATCTCTTCTACACGGAAGAT
 GAGATCTACGAGCTTTCTATGCCCGGGAACCAGCTGTCCCAAGAGTCTGCCACCGTCCCCCTTCAAAG
 CACCAGTGGTGTAGAGTGGGCCAGGGTGTGACACCAAAGCCAGACAGCGTGACTCTGGGTGAGCATGT
 GGAACAGCTGGTGGAGTCCGTGTTCAAGAACTACGACCCAGAAGGCCGTGGCTCCATCTCTCTGGAGGAC
 TTTGAGCGGTGTGAGGCAACTCCCGTTCGCCTGCCATGGGCTTACCCACCTCCCCGCCATGGGAGTG
 GCTCCTCAGCAGAGAGGAGCTGACCAAGTACCTGCTCCATGCCAGTCCATCTGCTCCAAGCTGGGCTT
 GGCCTTCTGCACGCCTCCAGGAGTACCTTCCGAAAGCCACGTTCTGTGACAGCTGCAGCGGCTTC
 CTCTGGGGGTACCAAGCAAGGCTATCGCTGTGGGACTGTGGGCTGTGTTGTGACAGACTGCAGGG
 ATCAAGTGAGAGTGGAGTGAAGAAGAGGCCAGAGACTAAGGGTGACCCGGGCCCCAGGTGCACCTGT
 GCCAGCCACATCACTTCCCTCCTGCAACTGTGGCTCAGAGGAAAGTCTCTCCTATACACTCTCCCCGGAT
 CCGGAGTCTGGTTGCCACCTTCGCCATGCTTGGACCCAGACGGAATCCTCACACTCTTCTGGGAGCCAG
 AGGTGGTGCCTGCCAGCACGGTCTTACCATCCAGAGCTTCTCGAAGCCAGCGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG225103 representing NM_145149
Red=Cloning site Green=Tags(s)

MNRKDIKRKSHQECGKAGGRGRSRQARRHKTCPTPREISKVMASMN LGVLSSESSCEDELLEECIRCFD
 SAGSLRRGDHILKMVLTMHSWLPSSELAARLLTSYQKAAKDAQELRQLQICYLVRYWLTHHHEAVHQEP
 QLEAVISRFWTTVAQEGNMAQRSLGDASSLLSPGGPGPPPMSSPGLGKKRKYVSLFDHLETEELAQHLT
 YLEFRSFQAITPQDLRGYVLQGSVRGCPALEGSVGLSNSVSRWVQVMVLSRPGPAQRAQVLDKFI RVAQR
 LHQLQNFNTLMAVTGGLCHSAISRKDSHVHLSPDSTKALLELELLSSHNNYAHYRRTWAGCTGFRLPV
 LGVHLKDLVSLYEAHPDRLPDGRLHLPKLNLSYLRLQELMALQGQHPPCSANEDLLHLLTSLDLFYTED
 EIYELSYAREPRCPKSLPPSPFKAPVVVEWAQGVTPKPD SVTLGQHVEQLVESVFKNYDPEGRGSI SLED
 FERLSGNFPFACHGLHPPRHGSGSFSREELTKYLLHASAICSKLGLAFLHAFQEVTRKPTFCHSCSGF
 LWGVTKQGYRCRDCGLCCHRHRCDQVRVECKRPETKGDGP GPAPVPATSLPPANC GSEESL SYTLSPD
 PESGCHLRHAWTQTESSHSSWEPEV VPCPARVLP SRASSKPSV

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_145149

ORF Size: 2019 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_145149.4](#), [NP_660131.2](#)

RefSeq Size: 4621 bp

RefSeq ORF: 2022 bp

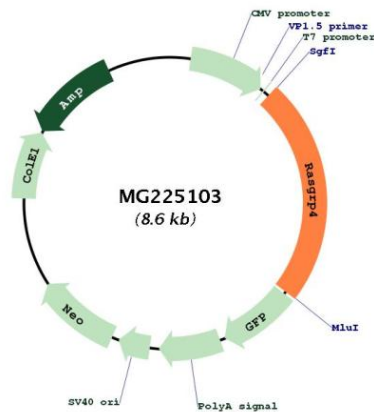
Locus ID: 233046

UniProt ID: [Q8BTM9](#)

Cytogenetics: 7 B1

Gene Summary: Functions as a cation- and diacylglycerol (DAG)-regulated nucleotide exchange factor activating Ras through the exchange of bound GDP for GTP. May function in mast cells differentiation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG225103