

## Product datasheet for **MR225103**

### Rasgrp4 (NM\_145149) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rasgrp4 (NM_145149) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rasgrp4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR225103 representing NM\_145149  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAACCGAAAGACATCAAAGGAAGTCTCATCAGGAATGCTCTGGGAAGGCAGGAGGGCGGGTTCGGT  
 CAGCTCAGGCCCGCCGCAAGACGTGCCACCCCGGAAATCAGCAAGGTCATGGCGTCCATGAA  
 TCTGGGAGTGCTGAGTGAGAGCAGCTGCAGCAAGATGAGCTATTGGAGGAATGTATCCGCTGCTTTGAC  
 TCGGCTGGCAGCCTGCGCCGAGGGGACCACATTCTCAAGATGGTCTCACGATGCACAGCTGGGTCTGC  
 CATCCTCAGAGCTCGCTGCCGCTGCTGACTTCGTATCAGAAGGCTGCCAAAGATGCCAAAGAGCTAAG  
 ACAGCTACAGATCTGTTACTTGGTCAGGACTGGCTGACCCATCACCATGAGGCAGTGCACCAGGAACCC  
 CAGCTGGAAGCAGTCATAAGCCGGTTTTGGACCACTGTCGCTCAGGAGGGCAACATGGCCAAAGGAGCC  
 TGGGAGATGCCTCCAGCCTGCTAAGTCTGGAGGGCCCGTCCCCACCTCCCATGAGCAGCCAGGCCCT  
 GGGCAAGAAGCGAAAGTGTATTGCTATTCGATCACCTGGAGACAGAGGAGCTGCCACAACACCTCACT  
 TACCTGGAGTTCGGTCTTTCCAGGCTATCACACCCCAAGACCTGCGGGGCTATGTTTTGCAAGGTTTCAG  
 TGAGAGGTTGTCCAGCTCTGGAAGTCTGTGGGTCTGAGCAACAGTGTGTCCCGCTGGGTGCAGGTCAT  
 GGTGCTGAGTCGTCTGGGCTGCACAACGTGCCAGGCTCTGGACAAATTCATTCGTGTGGCACAGAGG  
 CTTACCAGCTGCAGAATTTCAACACACTGATGGCGGTACGGGGGGTCTGTGTCAAGCCATCTCCA  
 GACTCAAGGACTCCCACGTTTCTGAGCCCTGACAGCACAAAGGCCCTGCTGGAGCTGACAGAGCTCCT  
 CTCATCCACAACTATGCCCACTACCGCCACCTGGGCCGGTGTACTGGCTTCCGGCTGCCAGTA  
 TGGGTGTGCACCTCAAGGACCTGGTATCTCTATATGAGGCTCATCCAGACAGATTGCCAGATGGCCGCC  
 TGCACCTACCAAGCTGAATAGCCTCTATCTACGGCTGCAGGAGCTGATGGCGCTCCAGGGACAGCATCC  
 TCCCTGCAGTGCCAATGAGGACCTGCTGCACCTGCTGACGCTCTCCCTGGATCTCTTCTACACGGAAGAT  
 GAGATCTACGAGCTTTCTATGCCCGGGAACACGCTGTCCCAAGAGTCTGCCACCGTCCCCCTTCAAAG  
 CACCAGTGGTGGTAGAGTGGGCCAGGGTGTGACACCAAAGCCAGACAGCGTGACTCTGGGTGAGCATGT  
 GGAACAGCTGGTGGAGTCCGTGTTCAAGAACTACGACCCAGAAGGCCGTGGCTCCATCTCTCTGGAGGAC  
 TTTGAGCGGTGTGAGGCAACTCCCGTTCGCCTGCCATGGGCTTACCCACCTCCCCGCCATGGGAGTG  
 GCTCCTCAGCAGAGAGGAGCTGACCAAGTACCTGCTCCATGCCAGTCCATCTGCTCCAAGCTGGGCTT  
 GGCCTTCTGCACGCCTCCAGGAGTACCTTCCGAAAGCCACGTTCTGTACAGCTGCAGCGGCTTC  
 CTCTGGGGGTACCAAGCAAGGCTATCGCTGTGGGACTGTGGGCTGTGTTGTACAGACTGCAGGG  
 ATCAAGTGAGAGTGGAGTGAAGAAGAGGCCAGAGACTAAGGGTGACCCGGGCCCCAGGTGCACCTGT  
 GCCAGCCACATCACTTCCCTCCTGCAACTGTGGCTCAGAGGAAAGTCTCTCCTATACACTCTCCCCGGAT  
 CCGGAGTCTGGTTGCCACCTTCGCCATGCTTGGACCCAGACGGAATCCTCACACTTCTCTGGGAGCCAG  
 AGGTGGTGCCTGCCAGCACGGTCTTACCATCCAGAGCTTCTCGAAGCCAGCGTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR225103 representing NM\_145149  
Red=Cloning site Green=Tags(s)

MNRKDIKRKSHQECGKAGGRGRSRQARRHKTCTPTREISKVMASMN LGVLSSESSCEDELLEECIRCFD  
 SAGSLRRGDHILKMVLTMHSWLPSSELAARLLTSYQKAAKDAQELRQLQICYLVRYWLTHHHEAVHQEP  
 QLEAVISRFWTTVAQEGNMAQRSLGDASSLLSPGGPGPPPMSSPGLGKKRKYVSLDFHLETEELAQLT  
 YLEFRSFQAITPQDLRGYVLQGSVIRGCPALEGSLVGLSNSVSRWVQVMVLSRPGPAQRAQVLDKFI  
 RVAQRLHQLQNFNTLMAVTGGLCHSAISRKDSHVHLSPDSTKALLELELLSSHNNYAHYRRTWAGCTG  
 FRLPLV LGVHLKDLVSLYEAHPDRLPDGRLHLPKLNLSYLRLQELMALQGQHPPCSANEDLLHLLT  
 LSLDLFYTED EIIYELSYAREPRCPKSLPPSPFKAPVVVEWAQGVTPKPDVTLGQHVQELVESV  
 FKNYDPEGRGSI SLED FERLSGNFPFACHGLHPPRHGSGFSREELTKYLLHASAICSKLGLAFL  
 HAFQEVTFRKPTFCHSCSGF LWGVTQGYRCRDCGLCCHRHCRDQVRVECKRPETKGD  
 PGPPGAPVPATSLPPANCSEESL SYTLSPD PESGCHLRHAWTQTESSHSSWEPEVPCPARVLP  
 SRASSKPSV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**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

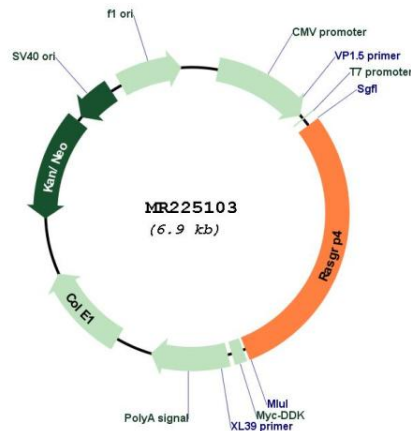
**UniProt ID:** [Q8BTM9](#)

**Cytogenetics:** 7 B1

**MW:** 75.4 kDa

**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 MR225103