

## Product datasheet for RC237489

### GRAP2 (NM\_001291825) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GRAP2 (NM_001291825) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GRAP2
Synonyms:	GADS; GRAP-2; GRB2L; GRBLG; GrbX; Grf40; GRID; GRPL; Mona; P38
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC237489 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGCTGTTGCCAAGTTTGATTTCACTGCTTCAGGTGAGGATGAACTGAGCTTTCACACTGGAGATG  
TTTTGAAGATTTAAGTAACCAAGAGGAGTGGTTAAGGCGGAGCTTGGGAGCCAGGAAGGATATGTGCC  
CAAGAATTTTCATAGACATCCAGTTTCCCAATGGTTTACGAAGGCTCTCTCGACACCAGGCAGAGAAC  
TACTCATGGGCAAGGAGTTGGCTTCTTCATCATCCGGGCCAGCCAGAGCTCCCAGGGGACTTCTCCA  
TCTCTGTCAGGCATGAGGATGACGTTCAACACTTCAAGGTCATGCGAGACAACAAGGTAATTACTTTCT  
GTGGACTGAGAAGTTCCATCCCTAAATAAGCTGGTAGACTACTACAGGACAAATTCATCTCCAGACAG  
AAGCAGATCTTCTTAGAGACAGAACCCGAGAAGACCAGGGTCACCGGGCAACAGCCTGGACCGGAGGT  
CCCAGGGAGGCCACACCTCAGTGGGGCTGTGGGAGAAGAAATCCGACCTTCGATGAACCGGAAGCTGTC  
GGATCACCCCCGACCCTTCCCCGTCAGCAGCACCAGCACCAGCCACAGCCTCCGCAATATGCCCCAGCG  
CCCCAGCAGCTGCAGCAGCCCCACAGCAGCGATATCTGCAGCACCACCATTTCCACCAGGAACGCCGAG  
GAGGCAGCCTTGACATAAATGATGGGCATTGTGGCACCAGGCTTGGGCAGTGAAATGAATGCGGCCCTCAT  
GCATCGGAGACACACAGACCCAGTGCAGCTCCAGGCGGCAGGGCAGTGGGTGGGCCCGGGCGCTGTAT  
GACTTTGAGGCCCTGGAGGATGACGAGCTGGGGTTCCACAGCGGGGAGGTGGTGGAGTCTGGATAGCT  
CCAACCCATCCTGGTGGACCGGCCGCTGCACAACAAGCTGGGCCCTTCCCTGCCAACTACGTGGCACC  
CATGACCCGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC237489 protein sequence  
Red=Cloning site Green=Tags(s)

MEAVAKFDFTASGEDELSFHTGDVLKILSNQEEWFKAELGSQEGYVPKNFIDIQFPKWFHEGLSRHQAEN  
 LLMGKEVGFIIIRASQSSPGDFISVVRHEDDVQHFVMDNKGNYFLWTEKFPSLNKLVDYYRTNSISRQ  
 KQIFLRDRTRREDQGHRGNSLDRRSQGGPHLSGAVGEEIRPSMNRKLSDHPPPTLPLQHQHQPPQYAPA  
 PQLQPPQRYLQHHHFHQERRGSLDINDGHCGTGLGSEMNAALMHRHRTDPVQLQAAGRVRWARALY  
 DFEALEDELGFHSGEVVEVLDSNPSWWTGRLHNKLGFLPANYVAPMTR

TRTRPLEQKLISEEDLAANDILDYKDDDDKVK

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6016\\_c10.zip](https://cdn.origene.com/chromatograms/mk6016_c10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001291825

**ORF Size:** 990 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\\_001291825.1](#), [NP\\_001278754.1](#)

**RefSeq Size:** 3541 bp

**RefSeq ORF:** 993 bp

**Locus ID:** 9402

**UniProt ID:** [O75791](#)

**Cytogenetics:** 22q13.1

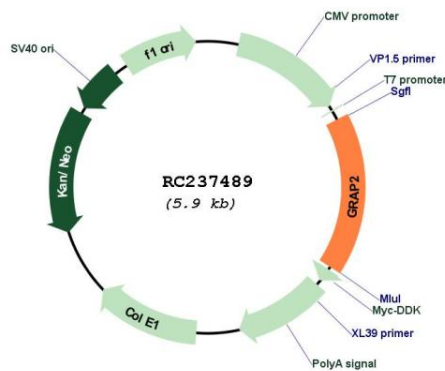
**Protein Families:** Druggable Genome

**Protein Pathways:** T cell receptor signaling pathway

**MW:** 37.9 kDa

**Gene Summary:** This gene encodes a member of the GRB2/Sem5/Drk family. This member is an adaptor-like protein involved in leukocyte-specific protein-tyrosine kinase signaling. Like its related family member, GRB2-related adaptor protein (GRAP), this protein contains an SH2 domain flanked by two SH3 domains. This protein interacts with other proteins, such as GRB2-associated binding protein 1 (GAB1) and the SLP-76 leukocyte protein (LCP2), through its SH3 domains. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Apr 2014]

### Product images:



Circular map for RC237489