

# **Product datasheet for RC236649**

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OriGene Technologies, Inc.

## GRAP2 (NM\_001291828) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** GRAP2 (NM\_001291828) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: GRAP2

Synonyms: GADS; GRAP-2; GRB2L; GRBLG; GrbX; Grf40; GRID; GRPL; Mona; P38

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC236649 representing NM\_001291828
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ATGGTTTCACGAAGGCCTCTCTCGACACCAGGCAGAGAACTTACTCATGGGCAAGGAGGTTGGCTTCTTC
ATCATCCGGGCCAGCCAGAGCTCCCCAGGGGACTTCTCCATCTCTGTCAGGGTCACCGGGGCAACAGCCT
GGACCGGAGGTCCCAGGGAGGCCCACACCTCAGTGGGGCTGTGGGAGAAAATCCGACCTTCGATGAAC
CGGAAGCTGTCGGATCACCCCCCGACCCTTCCCCTGCAGCAGCACCAGCACCAGCCCACAGCCCCCCCAAT
ATGCCCCAGCGCCCCAGCAGCTGCAGCAGCCCCCACAGCAGCACCAGCACCACCACTTTCCACCA
GGAACGCCGAGGAGGCAGCCTTGACATAAATGATGGGCATTGTGGCACCGGCTTGGGCAGTGAAATGAAT
GCGGCCCTCATGCATCGGAGACACCAGACCCAGTGCAGCTCCAGGCGGCAGGGCGAGTGCGGTGGGCCC
GGGCGCTGTATGACTTTGAGGCCCTGGAGGATGACGAGCTGGGGTTCCACAGCGGGGAGGTGGTGGAGGT
CCTGGATAGCTCCAACCCATCCTGGTGGACCGGCCGCCTGCACAACAACAAGCTGGGCCTCTTCCCTGCCAAC
TACGTGGCACCCATGACCCGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC236649 representing NM\_001291828

Red=Cloning site Green=Tags(s)

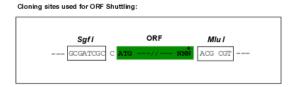
MVSRRPLSTPGRELTHGQGGWLLHHPGQPELPRGLLHLCQGHRGNSLDRRSQGGPHLSGAVGEEIRPSMN RKLSDHPPTLPLQQHQHQPQPPQYAPAPQQLQQPPQQRYLQHHHFHQERRGGSLDINDGHCGTGLGSEMN AALMHRRHTDPVQLQAAGRVRWARALYDFEALEDDELGFHSGEVVEVLDSSNPSWWTGRLHNKLGLFPAN YVAPMTR

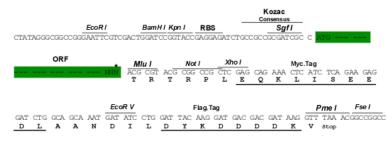
#### TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** 

Sgfl-Mlul

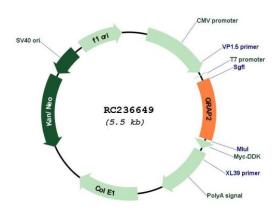
**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

#### Plasmid Map:



**ACCN:** NM\_001291828

ORF Size: 651 bp



## GRAP2 (NM\_001291828) Human Tagged ORF Clone - RC236649

**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: <u>NM 001291828.2</u>

 RefSeq Size:
 3138 bp

 RefSeq ORF:
 654 bp

 Locus ID:
 9402

 UniProt ID:
 075791

Cytogenetics: 22q13.1

**Protein Families:** Druggable Genome

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

**MW:** 24.8 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]