

Product datasheet for **RG206546**

GRAP2 (NM_004810) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRAP2 (NM_004810) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRAP2
Synonyms:	GADS; GRAP-2; GRB2L; GRBLG; GrbX; Grf40; GRID; GRPL; Mona; P38
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG206546 representing NM_004810 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGCTGTTGCCAAGTTTGATTTCACTGCTTCAGGTGAGGATGAACTGAGCTTTCACACTGGAGATG
TTTTGAAGATTTTAAGTAACCAAGAGGAGTGGTTAAGGCGGAGCTTGGGAGCCAGGAAGGATATGTGCC
CAAGAATTTTCATAGACATCCAGTTTCCCAAATGGTTTACGAAGGCTCTCTCGACACCAGGCAGAGAAC
TACTCATGGGCAAGGAGTTGGCTTCTTCATCATCCGGGCCAGCCAGAGCTCCCAGGGGACTTCTCCA
TCTCTGCAGGCATGAGGATGACGTTCAACACTTCAAGGTCATGCGAGACAACAAGGTAATTACTTTCT
GTGGACTGAGAAGTTCCATCCCTAAATAAGCTGGTAGACTACTACAGGACAAATTCATCTCCAGACAG
AAGCAGATCTTCTTAGAGACAGAACCAGGAGGTCACCGGGCAACAGCCTGGACCGGAGGT
CCCAGGGAGGCCACACCTCAGTGGGGCTGTGGGAGAAGAAATCCGACCTTCGATGAACCGGAAGCTGTC
GGATCACCCCCGACCCTTCCCTGCAGCAGCACCAGCACCAGCCACAGCCTCCGCAATATGCCCCAGCG
CCCCAGCAGCTGCAGCAGCCCCACAGCAGCGATATCTGCAGCACCACCATTTCCACCAGGAACGCCGAG
GAGGCAGCCTTGACATAAATGATGGGCATTGTGGCACCAGGCTTGGGCAGTGAAATGAATGCGGCCCTCAT
GCATCGGAGACACACAGACCCAGTGCAGCTCCAGGCGGCAGGGCAGTGGGTGGGCCCGGGCGCTGTAT
GACTTTGAGGCCCTGGAGGATGACGAGCTGGGGTTCCACAGCGGGGAGGTGGTGGAGTCTGGATAGCT
CCAACCCATCCTGGTGGACCGGCCGCTGCACAACAAGCTGGGCCCTTCCCTGCCAACTACGTGGCACC
CATGACCCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG206546 representing NM_004810
Red=Cloning site Green=Tags(s)

```
MEAVAKFDFTASGEDELSFHTGDVLKILSNQEEWFKAELGSQEGYVPKNFIDIQFPKWFHEGLSRHQAE
LLMGKEVGGFFIIRASQSSPGDFSISVRHEDDVQHFVMDNKGNYFLWTEKFPSLNKLVYYRTNSISRQ
KQIFLRDRTRDQGHGRNSLDRRSQGGPHLSGAVGEEIRPSMNRKLSDHPPTLPLQQHQHPQPPQYAPA
PQQLQQPPQQRYLQHHHFHQERRGGSLDINDGHCCTGLGSEMNAALMHRRHDPVQLQAAGRVRWARALY
DFEALEDDELGFHSGEVVEVLDSNPSWWTGRLHNKLGFLPANYVAPMTR
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004810

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_004810.4](#)

RefSeq Size: 1552 bp

RefSeq ORF: 993 bp

Locus ID: 9402

UniProt ID: [O75791](#)

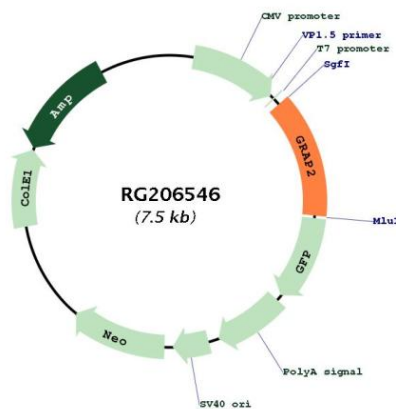
Cytogenetics: 22q13.1

Protein Families: Druggable Genome

Protein Pathways: T cell receptor signaling pathway

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 RG206546