

## Product datasheet for RC208908

### GRAP (NM\_006613) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GRAP (NM_006613) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GRAP
Synonyms:	DFNB114
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208908 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGTCCGTGGCCCTGTACAGCTTTCAGGCTACAGAGAGCGACGAGCTGGCCTTCAACAAGGGAGACA  
CACTCAAGATCCTGAACATGGAGGATGACCAGAAGTGGTACAAGGCCGAGCTCCGGGGTGTGAGGGATT  
TATCCCAAGAAGTACATCCGCGTCAAGCCCCATCCGTGGTACTCGGGCAGGATTTCCCGGCAGCTGGCC  
GAAGAGATTCTGATGAAGCGGAACCATCTGGGAGCCTTCTGATCCGGGAGAGTGAGAGTCCCCAGGGG  
AGTTCTCTGTGTCTGTGAATATGGAGACCAGGTGCAGCACTTCAAGGTGCTGCGTGAGGCCTCGGGGAA  
GTACTTCTGTGGGAGGAGAAGTTCAACTCCCTCAACGAGCTGGTCGACTTCTACCGCACCACCACCATC  
GCCAAGAAGCGGCAGATCTTCTGCGCGACGAGGAGCCCTTGCTCAAGTCACTGGGGCCTGCTTTGCC  
AGGCCAGTTTGACTTCTCAGCCCAGGACCCCTCGCAGCTCAGCTTCCGCCGTGGCGACATCATTGAGGT  
CCTGGAGCGCCCAGACCCCACTGGTGGCGGGCCGGTCTGCGGGCGCCTTGGCTTCTCCACGGAGT  
TACGTGCAGCCCGTGCACCTG

**ACGCGT**ACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC208908 protein sequence  
Red=Cloning site Green=Tags(s)

MESVALYSFQATESDELAFNKGDTLKILNMEDDQNWYKAELRGVEGFIPKNYIRVKPHPWYSGRISRQLA  
 EEILMKRNHLGAFLIRESESSPGEFVSVSVNYGDQVQHFVKVLRASGKYFLWEEKFNSLNELVDFYRTTTI  
 AKKRQIFLRDEEPLLKSPGACFAQAQDFSAQDPSQLSFRRGDIIEVLERPDPHWWRGRSCGRVGFPPRS  
 YVQPVHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6268\\_c05.zip](https://cdn.origene.com/chromatograms/mk6268_c05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_006613

**ORF Size:** 651 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_006613.4](#)

**RefSeq Size:** 2089 bp

**RefSeq ORF:** 654 bp

**Locus ID:** 10750

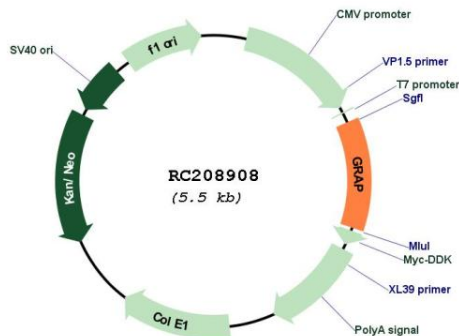
**UniProt ID:** [Q13588](#)

**Cytogenetics:** 17p11.2

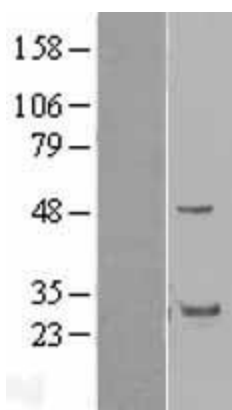
**MW:** 25.3 kDa

**Gene Summary:** This gene encodes a member of the GRB2/Sem5/Drk family and functions as a cytoplasmic signaling protein which contains an SH2 domain flanked by two SH3 domains. The SH2 domain interacts with ligand-activated receptors for stem cell factor and erythropoietin, and facilitates the formation of a stable complex with the BCR-ABL oncoprotein. This protein also associates with the Ras guanine nucleotide exchange factor SOS1 (son of sevenless homolog 1) through its N-terminal SH3 domain. In general, it couples signals from receptor and cytoplasmic tyrosine kinases to the Ras signaling pathway. [provided by RefSeq, Jul 2012]

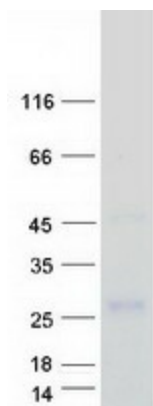
### Product images:



Circular map for RC208908



Western blot validation of overexpression lysate (Cat# [LY416529]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208908 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GRAP protein (Cat# [TP308908]). The protein was produced from HEK293T cells transfected with GRAP cDNA clone (Cat# RC208908) using MegaTran 2.0 (Cat# [TT210002]).