

Product datasheet for **RG215374**

GAB2 (NM_012296) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GAB2 (NM_012296) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GAB2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG215374 representing NM_012296
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

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TGCAGAACCCATGCAGGAGTGGACAGACGTGCGGCAGTCTCAGAGCCTTCCAAGGGTGCCAAGCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG215374 representing NM_012296
 Red=Cloning site Green=Tags(s)

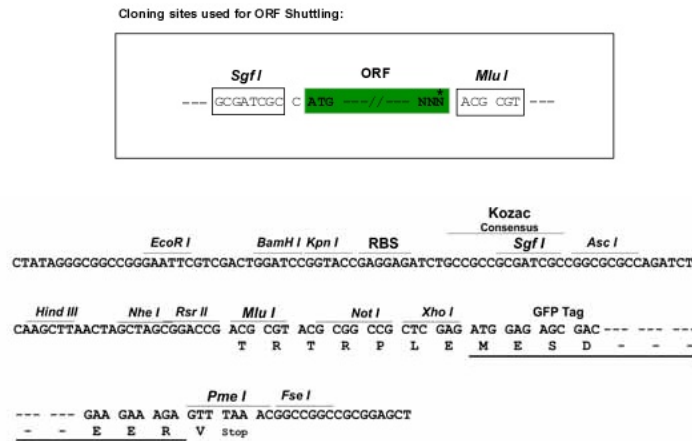
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YPSTTLPVHRGPRGSEIQPPPVRNLKPD R KAKPTPLDLRNNTVIDELPFKSPI TKSWSRANHTFNSSS
SQYCRPISTQSI TSDSGDSEENYVPMQNP VSASPVPSGTNSPAPKKTSGSVDYLALDFQPSSPSPHRKP
STSSVTSDEKVDYVQVDKEKTQALQNTMQE WTDVRSSEPSKGAKL
  
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012296

ORF Size: 2028 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_012296.2](#), [NP_036428.1](#)

RefSeq Size: 6053 bp

RefSeq ORF: 1917 bp

Locus ID: 9846

UniProt ID: [Q9UQC2](#)

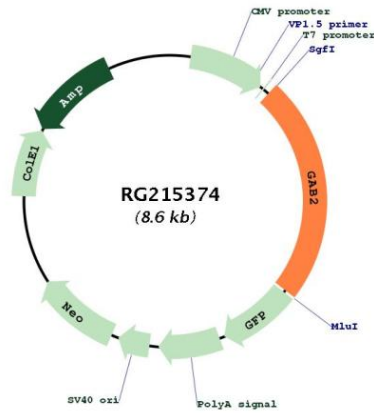
Cytogenetics: 11q14.1

Protein Families: Druggable Genome

Protein Pathways: Chronic myeloid leukemia, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis

Gene Summary:

This gene is a member of the GRB2-associated binding protein (GAB) gene family. These proteins contain pleckstrin homology (PH) domain, and bind SHP2 tyrosine phosphatase and GRB2 adapter protein. They act as adapters for transmitting various signals in response to stimuli through cytokine and growth factor receptors, and T- and B-cell antigen receptors. The protein encoded by this gene is the principal activator of phosphatidylinositol-3 kinase in response to activation of the high affinity IgE receptor. Two alternatively spliced transcripts encoding different isoforms have been described for this gene. [provided by RefSeq, Nov 2009]

Product images:


Circular map for RG215374