

Product datasheet for **RG215435**

GAB2 (NM_080491) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GAB2 (NM_080491) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GAB2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG215435 representing NM_080491
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCGGCGGCCGACGTGGTGTGCACCGGCTGGCTGAGGAAATCGCCTCCCAGAAGAAGTTGAGGC
GCTATGCCTGGAAGAAACGCTGGTTTATCCTGCGGAGTGGCCGGATGAGCGGTGACCCAGATGTTCTGGA
ATACTACAAGAACGATCACTCCAAGAAGCCTCTGCGGATCATCAACCTGAACTTCTGTGAGCAGGTAGAT
GCAGGCCGTGACCTTTAACAAGAAGGAGCTGCAGGATAGTTTTGTGTTTGACATCAAGACCAGTGAACGCA
CCTTTTACCTGGTGGCTGAGACAGAAGAGGACATGAATAAGTGGTCCAGAGCATCTGCCAGATCTGTGG
CTTCAATCAGGCTGAGGAGAGCACAGACTCCCTGAGAAATGTTTCCTCAGCCGGTATGGCCCCGCTCT
TCTCCAGCTGAGCTCAGCAGCTTAGCCAGCACCTTCTCCGAGAGCGCAAGTCTCAGCCCCATCACACT
CCAGCCAGCCAACCTGTTCACGTTTGAACCCCTGTGTCAAACCATGCAGCCCACCTGTCCACCAG
CGCACCTCAGGAGTATCTACTTGCACCAGTGCATAAGCCGAAGAGCAGAAAATGCAAGGAGTGCCAGC
TTCTCTCAGGGCACCCAGAGCCTCTTTTCTCATGAGGAGTGACACAGCTGTACAAAACTTGCCCAGGGCA
ATGGACACTGTGTCAACGGGATCAGTGGTCAAGTCCATGGCTTCTATAGCCTTCCCAAGCCGAGCCGGCA
CAATACAGAATTCAGAGACAGTACCTACGACCTCCCCCGCAGCCTGGCCTCCCATGGCCACACCAAGGGC
AGCCTCACAGGCTCCGAGACAGATAATGAGGATGTGTACACCTTCAAGACGCCAGCAACACCCTGTGCA
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TAGGACATTCCTCTGGACAAAAACCAATGCCATGACAGTGGCCACTCCTGGGACTCAGCCATAGCT
CCCCACCCCGCCCCCAAGCCAAGTCAGGCAGAAACACCTCGATGGGGCAGTCTCAGCAGAGACCCGC
CAATCAGTGAAAAATAGCAGATCTGTGCTGCCACCATCCCAGACGCAACACCCTCCCTGCAATGGACAA
CAGCCGACTTACCGAGCTTCTTCTGTGAGACCTACGAGTACCCACAGGTGGTGGAGAGAGTGCAGGC
CGGTCTGCTGAATCCATGAGTGTGAGTGGCTCTTTCTGCCAGGAAAATGATTGTGGGCCGATCGG
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AGCAGGTGATAATCCCAGAGCGTCTACATCCCAATGAGCCAGGGGCCATCACTTTGACTCACTTGGC
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ACCGCAACCTCAAACCTGATCGGAAAGCAAAGCCAACACCACTTGACCTGAGGAACAACACCGTCATCGA
TGAATCCCCTTCAAGTCACTATACCAAGTCTTGGTCTAGGGCCAACACACCTTCAACTCCAGCTCC
TCCAGTACTGCCGCCATCTCCACCCAGAGCATCACCAGCACAGACTCAGGAGACAGCGAAGAGAAT
ATGTCCCTATGCAAAACCCAGTGTCTGCATCTCCGTTCCAGTGGCACGAAACAGTCTGCCCTAAGAA
GAGCACCGGCAGCGTTGATTATCTGGCCCTGGACTTCCAGCCGAGCTCCCAAGCCCCACCGCAAGCCA
TCTACTTCATCCGTCACCTCTGATGAGAAGGTGGACTACGTTTCAAGTGGACAAGGAGAAGACCCAGGCC
TGAGAACACCATGCAGGAGTGGACAGACGTGCGGCAGTCTCGGAGCCTTCCAAGGGTGCCAAGCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG215435 representing NM_080491
Red=Cloning site Green=Tags(s)

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MSGGGDVVCTGWLRLKSPPEKLRRYAWKKRWFILRSGRMSGDPDVL EYYKNDHSHKPLRIINLNFCEQVD
AGLTFNKKELQDSFVFDIKTSERTFYLV AETEEDMNKVVQSI CQICGFNQAEESTDSL RNVSSAGHGPRS
SPAELSSSSQHLLRERKSSAPSHSSQPTLFTFEPVSNHMQPTLST SAPQEYLYLHQ CISRRAENARSAS
FSQGRASFLMRSDTAVQKLAQGNHGCVNGI SGQVHG FYSLPKPSRHNT EFRDSTYDLPRSLASHGHTKG
SLTGSETDNEDVYTFKTPSNTLCREFGDLLVDNMDVPATPL SAYQIPRTF TLDKNHNAMTVATPGDSAIA
PPRPPPKPSQAETPRWGSPPQRPPISENSR SVAATIPRNTLPAMDNSRLHRASSCET YEYPQRGGSAG
RSAESMSDGVGSFLPGKMI VGRSDSTNSEDNYVPMNPGSSTLLAMERAGDNSQSVYIPMSPGAHHFDSL G
YPSTTLPVHRGSRGSEIQPPP VNRNLKPRKAKPTPLDLRNNTVIDELPFKSPI TKSWSRANHTFNSSS
SQYCRPISTQSI TSDSGDSEENYVPMQNPV SASPVPSGTNSPAPKKSTGSDVYLALDFQPSSSPHRPK
STSSVTSDEKVDYVQVDKEKTQALQNTMQEWT DVRQSSEPSKGAKL
    
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_080491

ORF Size: 2028 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_080491.1](#), [NP_536739.1](#)

RefSeq Size: 6007 bp

RefSeq ORF: 2031 bp

Locus ID: 9846

UniProt ID: [Q9UQC2](#)

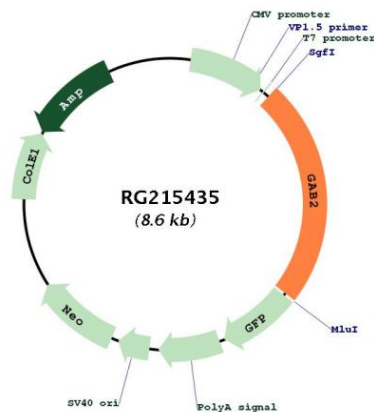
Cytogenetics: 11q14.1

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 RG215435