

Product datasheet for **RG216110**

GRB 14 (GRB14) (NM_004490) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRB 14 (GRB14) (NM_004490) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRB 14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG216110 representing NM_004490
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACCACTTCCCTGCAAGATGGCAGAGCGCCGCGAGCAGGGCGGCTGCCCGGATTCCGCCGTGGCCG
 CCCAGGTGTGTGGCGCTGCCAGGGGAGGGGCGACGCCACGACCTGGCGCCGGCCCCCTGGCTGCACGC
 GCGAGCGCTCCTGCCCTTCCGGACGGGACCCGCGGCTGTGCTGCAGACAGGAGAAAAAAGAAAGATCTT
 GATGTTCCGAAATGCCATCTATTCCAAACCCCTTTTCTGAGCTATGCTGTTCTCCATTTACATCTGTTT
 TGTGACGACAGCTATTTCCCAAAGCAAATTCAGGAAAAAACAGGTGATTAAGTATACAGTGAAGATGA
 AACGACGAGGGCTTAGATGTACCCAGTGACATAACGGCTCGAGATGTTTGTGAGCTGTTGATCTGAAG
 AATCATTACATTGATGACCACAGCTGGACCCTTTTGGACCTGCCTCACATAGGTGTAGAAAGAACA
 TAGAAGACCACGAACTGGTGATTGAAGTCTATCCAACGGGGGATAGAAGAAGAAAAACAACTATACTT
 TAGAAAAAATTATGCCAAATATGAGTTCTTTAAAAACCAATGTATTTTTTCCAGAGCATATGGTATCT
 TTTGCAACTGAAACCAATGGTGAATATCCCCACACAGATTTTGCAGATGTTTCTGAGTTCAAGCACAT
 ATCCTGAAATTCATGGTTTCTTACATGCGAAAGAACAGGGAAAGAAGTCTTGAAAAAATTTACTTTTT
 TCTAAGAAGATCTGGTTTATATTTTTCTACTAAAGGAACATCAAAGAACCGCGCATTTGCAGTTTTTC
 AGCGAATTTGGCAATAGTGATATTTATGTGCTACTGGCAGGCAAAAAAAAAACATGGAGCACCGACTAACT
 ATGGATTCTGCTTAAAGCCTAACAAAGCGGGAGGGCCCCGAGACCTGAAAATGCTCTGTGCAAGAAGA
 GCAGAGTAGGACGTGCTGGTGACCGGATTAGATTGCTTAAGTATGGCATGCAGCTGTACCAGAATTAT
 ATGCATCCATATCAAGGTAGAAGTGGCTGCAGTTCACAGAGCATATCACCTATGAGAAGTATATCAGAGA
 ATTCCCTGGTAGCAATGGACTTCTCAGGCCAGAAAAAGCAGAGTTATAGAAAAATCCCACTGAAGCCCTTTC
 AGTTGCGGTTGAAGAAGGACTCGCTTGGAGGAAAAAAGGATGTTTACGCCTGGGCACTCACGGTAGCCCC
 ACTGCCTCTTACAGAGCTCTGCCACAAACATGGCTATCCACCGTCCCAGCCATGGTTTACCACAAAA
 TTTCTAGAGATGAGGCTCAGCGATTGATTATTCAGCAAGGACTTGTGGATGGAGTTTTCTTGGTACGGGA
 TAGTCAGAGTAACCCAAAACTTTCGACTGTCAATGAGTCATGGACAAAAAATAAAGCACTTTCAAATT
 ATACCAGTAGAAGATGACGGTGAATGTTCCACACACTGGATGATGGCCACACAAGATTTACAGATCTAA
 TACAGCTGGTGGAGTTCTATCAACTCAATAAGGGGCTTCTCCTGCAAGTTGAAACATTATTGTGCTAG
 GATTGCTCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG216110 representing NM_004490
 Red=Cloning site Green=Tags(s)

MTTSLQDQSAASRAAARDSPLAAQVCGAAQGRGDAHDLAPAPWLHARALLPLPDGTRGCAADRRKKDL
 DVPEMPSIPNPFPELCCSPFTSVLSADLFPKANSRKKQVIKVSSEDETSRALDVPDITARDVCQLLILK
 NHYIDDSWTLFEHLPHIGVERTIEDHELVEIVLSNWGIEENKLYFRKNYAKYEFFKNPMYFFPEHMVS
 FATETNGEISPTQILQMFLSSSTYPIHGFLHAKEQGGKSWKKIYFFLRSSGLYFSTKGTSTKEPRHLQFF
 SEFGNSDIYVSLAGKKKHGAPTNYGFCFKPNKAGGPRDLKMLCAEEEEQSRTCWVTAIRLLKYGMQLYQNY
 MHPYQGRSGCSSQISPMRSISENSLVAMDFSGQKSRVIENPTEALSVAVEEGLAWRKKGLRLGTHGSP
 TASSQSSATNMAIHRSPWFHKKISRDEAQRLLIIQQGLVDGVFLVRDSQSNPKTFVLSMSHGQKIKHFQI
 IPVEDDGMFHTLDDGHTRFTDLIQLVEFYQLNKGVLPCCLKHYCARIAL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_004490

ORF Size: 1620 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_004490.1](#), [NP_004481.1](#)

RefSeq Size: 2376 bp

RefSeq ORF: 1623 bp

Locus ID: 2888

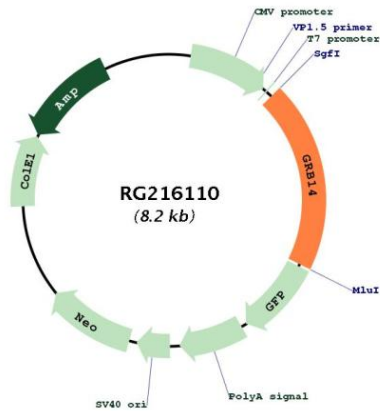
UniProt ID: [Q14449](#)

Cytogenetics: 2q24.3

Domains: RA, SH2, PH

Gene Summary: The product of this gene belongs to a small family of adapter proteins that are known to interact with a number of receptor tyrosine kinases and signaling molecules. This gene encodes a growth factor receptor-binding protein that interacts with insulin receptors and insulin-like growth-factor receptors. This protein likely has an inhibitory effect on receptor tyrosine kinase signaling and, in particular, on insulin receptor signaling. This gene may play a role in signaling pathways that regulate growth and metabolism. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]

Product images:



Circular map for RG216110