

Product datasheet for **RG220822**

GRB10 (NM_001001550) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRB10 (NM_001001550) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRB10
Synonyms:	Grb-10; GRB-IR; IRBP; MEG1; RSS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG220822 representing NM_001001550
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAATGCATCCCTGGAGAGCCTGTACTCGGCCTGCAGCATGCAGTCAGACACGGTGCCCTCCTGCAGA
 ATGGCCAGCATGCCCGCAGCCAGCCTCGGGCTTACAGCCCTCCTCGGTCCATCCAGCCACAGGTGTCCCC
 GAGGCAGAGGGTGCAGCGCTCCCAGCCTGTGCACATCCTCGTGTGAGGGCCTTTCAGGAGGAAGACCAG
 CAGTTTAAACCTCATCTCTGCCGGCCATCCCCAATCCTTTTCTGAACTCTGTGGCCCTGGGAGCCCC
 CTGTGCTCACGCCGGTTCTTTACCTCCGAGCCAGGCCGCGCAAAGCAGGATGTTAAAGCTTTAGTGA
 AGATGGGACAAGCAAAGTGGTGGAGATTCTAGCAGACATGACAGCCAGAGACCTGTGCCAATTGCTGGTT
 TACAAAAGTCACTGTGTGGATGACAACAGCTGGACACTAGTGGAGCACCACCCGACCTAGGATTAGAGA
 GGTGCTTGAAGACCATGAGCTGGTGGTCCAGGTGGAGAGTACCATGGCCAGTGAGAGTAAATTTCTATT
 CAGGAAGAATTACGAAAATACGAGTTCTTTAAAAATCCCATGAATTTCTCCAGAACAGATGGTTACT
 TGGTGCCAGCAGTCAAATGGCAGTCAAACCCAGCTTTTGCAGAATTTTCTGAACTCCAGTAGTTGTCCTG
 AAATCAAGGGTTTTTGCATGTGAAAGAGCTGGGAAAGAAATCATGGAAAAGCTGTATGTGTGTTGCG
 GAGATCTGGCCTTTATTGCTCCACCAAGGGAATTCAAAGGAACCCAGACACCTGCAGCTGCTGGCCGAC
 CTGGAGGACAGCAACATCTTCTCCCTGATCGCTGGCAGGAAGCAGTACAACGCCCTACAGACCAGGGC
 TCTGCATAAAGCCAAACAAAGTCAGGAATGAACTAAAGAGCTGAGGTTGCTCTGTGCAGAGGACGAGCA
 AACCAGGACGTGCTGGATGACAGCGTTCAGACTCCTCAAGTATGGAATGCTCCTTTACCAGAATTACCGA
 ATCCCTCAGCAGAGGAAGCCCTTGCTGTCCCGTTCTCGACGCCAGTGGCAGTGTCTCCGAGAATCCC
 TCGTGGCAATGGATTTTCTGGCAAACAGCAGCGGTGATAGAGAATCCGGCGGAGCCAGAGCCGACG
 CCTGGAGGAGGGCCACGCTGGAGGAAGCGAAGCACACGGATGAACATCCTAGGTAGCCAAAGTCCCTC
 CACCCTTCTACCCTAAGTACAGTATTACAGGACACAGCACTGGTTTACGGGAGGATCTCCAGGAGG
 AATCCACAGGATCATTAAACAGCAAGGCTCGTGGATGGGCTTTTTCTCCTCCGTGACAGCCAGAGTAA
 TCCAAAGGCATTTGTACTIONACTGTGTATCACCAGAAAATAAAAATTTCCAGATCTTACCTTGCAG
 GACGACGGGCAGACGTTCTTACGCTAGATGACGGGAACACCAAATTTCTGACCTGATCCAGCTGGTTG
 ACTTTTACCAGCTGAACAAAGGAGTCTGCCTTGCAAACCAAGCACCCTGCATCCGAGTGGCCTTA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG220822 representing NM_001001550
 Red=Cloning site Green=Tags(s)

MNASLESLSACSMSQSDTVPLLQNGQHARSQPRASGPPRSIQPVSPRQRVQRSQPVHILAVRRLQEEDQ
 QFRTSSLPAIPNPFPELCPGSPVLPVTPGSLPPSQAQAKQDVKVFSEDTGSKVVEILADMTARDLCQLLV
 YKSHCVDNDSWTLVEHHPHLGLERCLEDELVVQVESTMASESKFLFRKNYAKYEFFKNPMNFFPEQMVT
 WCQQSNGSQTQLLQNFLNSSSPEIQGFLHVKELGKKSWKLYVCLRRSGLYCSTKGTSTKEPRHLQLLAD
 LEDSNIFSLIAGRKQYNAPTDHGLCIKPNKVRNETKELRLLCAEDEQTRTCWMTAFRLLKYGMMLYQNYR
 IPQQRKALLSPFSTPVRSVSENSLVAMDFSGQTGRVIENPAEQSAALEEGHAWRKRSTRMNLGQSPL
 HPSTLSTVIHRTQHFHGRISREESHRIKQQLVDGLFLLRDSQSNPKAFVLTLCCHQKIKNFQILPCE
 DDGQTFSLDDGNTKFSDLIQLVDFYQLNKGVLPCCLKHHCIRVAL

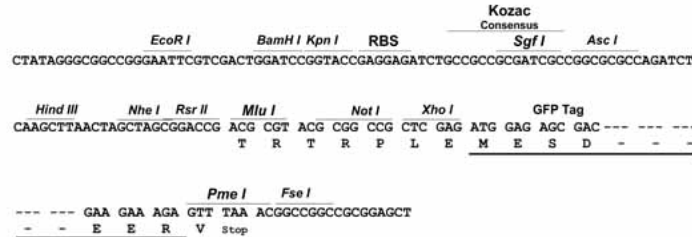
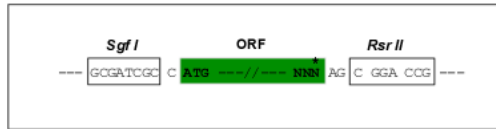
SGP**TRRRLE** - GFP Tag - V

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:


ACCN: NM_001001550

ORF Size: 1608 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_001001550.2](#), [NP_001001550.1](#)
RefSeq Size: 4797 bp

RefSeq ORF: 1611 bp

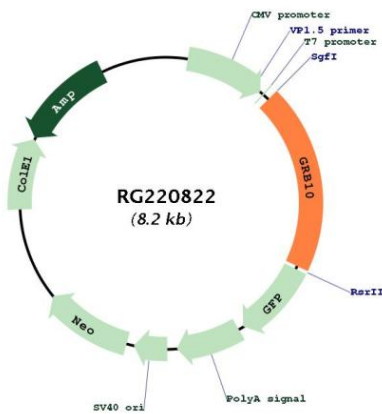
Locus ID: 2887

UniProt ID: [Q13322](#)
Cytogenetics: 7p12.1

Protein Families: Druggable Genome

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. Overexpression of some isoforms of the encoded protein inhibits tyrosine kinase activity and results in growth suppression. This gene is imprinted in a highly isoform- and tissue-specific manner, with expression observed from the paternal allele in the brain, and from the maternal allele in the placental trophoblasts. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Oct 2010]

Product images:



Circular map for RG220822