

Product datasheet for **RC220779**

GRB10 (NM_001001549) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRB10 (NM_001001549) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GRB10
Synonyms:	Grb-10; GRB-IR; IRBP; MEG1; RSS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC220779 representing NM_001001549
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTTTAGCCGGCTGCCAGATTCTTTTTGCACCATCCGTACTIONACCAGGACAAGGTGGAGCAGACAC
 CTCGCAGTCAACAAGACCCGGCAGGACCAGGACTCCCCGCACAGTCTGACCGACTTGCGAATCACCAGGA
 GGATGATGTGGACCTGGAAGCCCTGGTGAACGATATGAATGCATCCCTGGAGAGCCTGTACTIONCGGCCCTGC
 AGCATGCAGTCAGACACGGTGCCCTCTCTGCGAATGGCCAGCATGCCCGCAGCCAGCCTCGGGCTTCAG
 GCCCTCTCGGTCCATCCAGCCACAGGTGTCCCCGAGGCAGAGGGTGCAGCGCTCCAGCCTGTGCACAT
 CCTCGCTGTCCAGGCGCTTCAGGAGGAAGACCAGCAGTTTAGAACCCTCATCTCTGCCGCCATCCCCAAT
 CCTTTTCTGAACTCTGTGGCCCTGGGAGCCCCCTGTGCTCACGCCGGTTCTTTACCTCCGAGCCAGG
 CCGCCGAAAGCAGGATGTTAAAGTCTTAGTGAAGATGGACAAGCAAAGTGGTGGAGATTCTAGCAGA
 CATGACAGCCAGAGACCTGTGCCAATTGCTGGTTACAAAAGTCACTGTGTGGATGACAACAGCTGGACA
 CTAGTGGAGCACCCGCACCTAGGATTAGAGAGGTGCTTGAAGACCATGAGCTGGTGGTCCAGGTGG
 AGAGTACCATGGCCAGTGAAGTAAATTTCTATTAGGAAGAATTACGAAAATACGAGTTCTTTAAAAA
 TCCCATGAATTTCTCCAGAACAGATGGTTACTTGGTGCACGAGTCAAATGGCAGTCAAACCCAGCTT
 TTGAGGAACCCAGACACCTGCAGCTGTGGCCGACCTGGAGGACAGCAACATCTTCTCCCTGATCGCTG
 GCAGGAAGCAGTACAACGCCCTACAGACCACGGGCTCTGCATAAAGCCAAACAAAGTCAAGGATGAAAC
 TAAAGAGCTGAGGTTGCTCTGTGCAGAGGACGAGCAAACCAGGACGTGCTGGATGACAGCGTTGAGACTC
 CTAAGTATGGAATGCTCCTTTACCAGAATTACCGAATCCCTCAGCAGAGGAAGGCCCTGTGTCCCCGT
 TCTCGACGCCAGTGCAGTGTCTCCGAGAACTCCCTCGTGGCAATGGATTTTTCTGGGCAACAGGACG
 CGTGATAGAGAATCCGGCGGAGGCCAGAGCGCAGCCCTGGAGGAGGGCCACGCCCTGGAGGAAGCGAAGC
 ACACGGATGAACATCCTAGGTAGCCAAAGTCCCCTCCACCCTTCTACCCTAAGTACAGTGATTACAGGA
 CACAGCACTGGTTTACGGGAGGATCTCCAGGGAGGAATCCACAGGATCATTAAACAGCAAGGGCTCGT
 GGATGGGCTTTTTCTCCTCCGTGACAGCCAGGTAATCCAAAGGCATTTGTACTIONCACACTGTGCATCAC
 CAGAAAATTTAAATTTCCAGATCTTACCTTGGCAGGACGACGGGACAGCTTCTCAGCCTAGATGACG
 GGAACACCAAATCTCTGACCTGATCCAGCTGGTTGACTTTACCAGCTGAACAAAGGAGTCTGCCTTG
 CAAACTCAAGCACCCTGCATCCGAGTGGCCTTA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>RC220779 representing NM_001001549
 Red=Cloning site Green=Tags(s)

MALAGCPDSFLHHPYYQDKVEQTPRSQQDPAGPLPAQSDRLANHQEDDVLEALVNDMNASLESLYSAC
 SMQSDTVPLLQNGQHARSQPRASGPPRSIQPVSPRQRVQRSQPVHILAVRRLQEEDQQFRTSSLPAIPN
 PFPPELCPGSPVLPVTPGSLPPSQAQAAKQDVKVFSEDGTSKVVEILADMTARDLCQLLVYKSHCVDDNSWT
 LVEHHPHLGLERCLEDEHELVVQVESTMASESKFLFRKNYAKYEFFKNPMNFFPEQMVTWCQSQNGSQTQL
 LQEPRHLQLLADLEDSNIFSLIAGRKQYNAPTDHGLCIKPNKVRNETKELRLLCAEDEQTRTCWMTAFRL
 LKYGMLLQNYRIPQQRKALLSPFSTPVRVSENSLVAMDFSGQTGRVIENPAEAQSAALEEGHAWRKRS
 TRMNILGSQSPHPSTLSTVIHRTQHWFHGRISREESHRIKQQGLVDGLFLLRDSQSNPKAFVLTLCCHH
 QKIKNFQILPCEDDGQTFSLDDGNTKFSDLIQLVDFYQLNKGVLPCCLKHHCIRVAL

SGP**TRRRLEQKLI**SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8066_f12.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_001001549

ORF Size: 1644 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_001001549.2](#), [NP_001001549.1](#)

RefSeq Size: 4579 bp

RefSeq ORF: 1647 bp

Locus ID: 2887

UniProt ID: [Q13322](#)

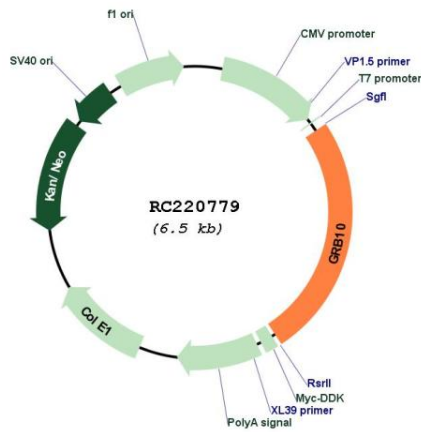
Cytogenetics: 7p12.1

Protein Families: Druggable Genome

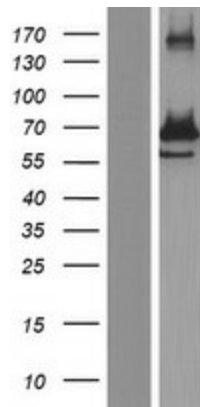
MW: 61.8 kDa

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 RC220779



Western blot validation of overexpression lysate (Cat# [LY424374]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220779 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).