

## Product datasheet for **RG220779**

### **GRB10 (NM\_001001549) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GRB10 (NM_001001549) 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)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG220779 representing NM\_001001549  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTTTAGCCGGCTGCCAGATTCTTTTTGCACCATCCGTACTIONACCAGGACAAGGTGGAGCAGACAC  
 CTCGCAGTCAACAAGACCCGGCAGGACCAGGACTCCCGCACAGTCTGACCGACTTGCGAATCACCAGGA  
 GGATGATGTGGACCTGGAAGCCCTGGTGAACGATATGAATGCATCCCTGGAGAGCCTGTACTIONCGGCTGC  
 AGCATGCAGTCAGACACGGTGCCCTCTCTGCGAATGGCCAGCATGCCCGCAGCCAGCCTCGGGCTTCAG  
 GCCCTCTCGGTCCATCCAGCCACAGGTGTCCCGAGGCAGAGGGTGCAGCGCTCCAGCCTGTGCACAT  
 CCTCGCTGTCAAGCGCCTTCAGGAGGAAGACCAGCAGTTTAGAACCCTCATCTCTGCCGCCATCCCCAAT  
 CCTTTTCTGAACTCTGTGGCCCTGGGAGCCCCCTGTGCTCACGCCGGTTCTTTACCTCCGAGCCAGG  
 CCGCCGAAAGCAGGATGTTAAAGTCTTAGTGAAGATGGACAAGCAAAGTGGTGGAGATTCTAGCAGA  
 CATGACAGCCAGAGACCTGTGCCAATTGCTGGTTTACAAAAGTCACTGTGTGGATGACAACAGCTGGACA  
 CTAGTGGAGCACCCGCACCTAGGATTAGAGAGGTGCTTGAAGACCATGAGCTGGTGGTCCAGGTGG  
 AGAGTACCATGGCCAGTGAAGTAAATTTCTATTAGGAAGAATTACGAAAATACGAGTTCTTTAAAAA  
 TCCCATGAATTTCTCCAGAACAGATGGTTACTTGGTGCACGAGTCAAATGGCAGTCAAACCCAGCTT  
 TTGAGGAACCCAGACACCTGCAGCTGTGGCCGACCTGGAGGACAGCAACATCTTCTCCCTGATCGCTG  
 GCAGGAAGCAGTACAACGCCCTACAGACCACGGGCTCTGCATAAAGCCAAAACAAAGTCAGGAATGAAAC  
 TAAAGAGCTGAGGTTGCTCTGTGCAGAGGACGAGCAAACCAGGACGTGCTGGATGACAGCGTTGAGACTC  
 TCAAGTATGGAATGCTCCTTTACCAGAATTACCGAATCCCTCAGCAGAGGAAGGCCCTTGTGTCCCGT  
 TCTCGACGCCAGTGCAGTGTCTCCGAGAATCCCTCGTGGCAATGGATTTTTCTGGCAAACAGGACG  
 CGTGATAGAGAAATCCGGCGGAGGCCAGAGCGCAGCCCTGGAGGAGGGCCACGCCCTGGAGGAAGCGAAGC  
 ACACGGATGAACATCCTAGGTAGCCAAAGTCCCTCCACCCTTCTACCCTAAGTACAGTGATTACACAGGA  
 CACAGCACTGGTTTACGGGAGGATCTCCAGGGAGGAATCCACAGGATCATTAAACAGCAAGGGCTCGT  
 GGATGGGCTTTTTCTCCTCCGTGACAGCCAGGTAATCCAAAGGCATTTGTACTIONCACACTGTGCATCAC  
 CAGAAAATTTAAATTTCCAGATCTTACCTTGCAGGACGACGGGACAGCTTCTCAGCCTAGATGACG  
 GGAACACCAAATCTCTGACCTGATCCAGCTGGTTGACTTTTACCAGCTGAACAAAGGAGTCTGCCTTG  
 CAAACTCAAGCACCCTGCATCCGAGTGGCCTTA

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

**Protein Sequence:**

>RG220779 representing NM\_001001549  
 Red=Cloning site Green=Tags(s)

MALAGCPDSFLHHPYYQDKVEQTPRSQQDPAGPGLPAQSDRLANHQEDDVLLEALVNDMNASLESLSYAC  
 SMQSDTVPLLQNGQHARSQPRASGPPRSIQPVSPRQRVQRSQPVHILAVRRLQEEDQQFRTSSLPAIPN  
 PFPELCPGSPVLPVTPGSLPPSQAQAKQDVKVFSEDGTSKVVEILADMTARDLCQLLVYKSHCVDDNSWT  
 LVEHHPHLGLERCLELDELVVQVESTMASESKFLFRKNYAKYEFFKNPMNFFPEQMVTWCQQSNGSQTQL  
 LQEPRHLQLLADLEDSNIFSLIAGRKQYNAPTDLGLCIKPNKVRNETKELRLLCAEDEQTRTCWMTAFRL  
 LKYGMLLYQNYRIPQQRKALLSPFSTPVRVSVNSLVAMDFSGQTGRVIENPAEAQSAALEEGHAWRKRS  
 TRMNILGSQSPHPSTLSTVIHRTQHWFHGRISREESHRIKQQGLVDGLFLLRDSQSNPKAFVLTLCCH  
 QKIKNFQILPCEDDGQTFSLDDGNTKFSDLIQLVDFYQLNKGVLPCCLKHHCIRVAL

SGP**TRRRLE** - GFP Tag - V

**Restriction Sites:**

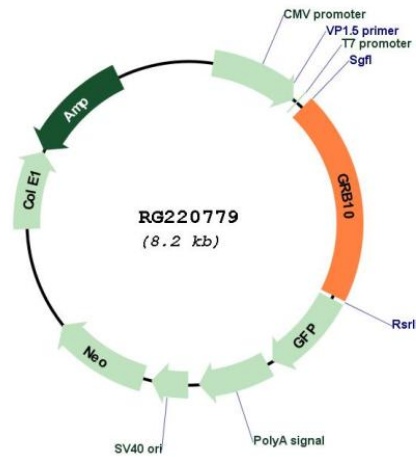
Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



<b>ACCN:</b>	NM_001001549
<b>ORF Size:</b>	1644 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001001549.2</a> , <a href="#">NP_001001549.1</a>
<b>RefSeq Size:</b>	4579 bp
<b>RefSeq ORF:</b>	1647 bp
<b>Locus ID:</b>	2887
<b>UniProt ID:</b>	<a href="#">Q13322</a>
<b>Cytogenetics:</b>	7p12.1
<b>Protein Families:</b>	Druggable Genome
<b>Gene Summary:</b>	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]