

## Product datasheet for **RC234421**

### **GRB7 (NM\_001242442) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GRB7 (NM_001242442) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GRB7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC234421 representing NM\_001242442  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGAAAGTGGAGGCCGGGACAAGGGCACACAACTGGTTCGGTTAAGCCCTCTCTCGCTCAGACGCCA  
 TGGAGCTGGATCTGTCTCCACCTCATCTTAGCAGCTCTCCGGAAGACCTTTGCCAGCCCTGGGACCCC  
 TCCTGGGACTCCCCGGCCCCCTGATACCCTCTGCCTGAGGAGGTAAAGAGGTCCACGCCTCTCCTCATC  
 CCAACCACCGGCAGGAACTTCGAGAGGAGGAGAGGCGTGCCACCTCCCTCCCCTCTATCCCAACCCCT  
 TCCCTGAGCTCTGCAGTCTCCCTCACAGACCCAATTCTCGGGGCCCCCTCCAGTGCAAGGGGGTCTGT  
 CCCCCGATGCCAGCCGCCCATGTAGTAAAGGTGTACAGTGAAGTGGGCGTGCAGGTCTGTGGAG  
 GTGGCAGCAGGTGCCACAGCTCGCCACGTGTGAAATGCTGGTGCAGCGAGCTCACGCCTTGAGCGACG  
 AGACCTGGGGGTGGTGGAGTGCCACCCACCTAGCACTGGAGCGGGTTTGGAGGACCAGAGTCCGT  
 GGTGGAAGTGCAGGCTGCCTGGCCGTGGGCGGAGATAGCCGCTTCGTCTCCGAAAAAATTCGCCAAG  
 TACGAAGTGTCAAGAGCTCCCCACACTCCCTGTTCCAGAAAAAATGGTCTCCAGCTGTCTCGATGCAC  
 ACACTGGTATATCCCATGAAGACCTCATCCAGAATTCCTGAATGCTGGCAGCTTTCCTGAGATCCAGGG  
 CTTTCTGCAGCTGCGGGTTTCAGGACGGAAGCTTTGAAAACGCTTTTCTGCTTCTTGCGCCGATCTGGC  
 CTCTATTACTCCACCAAGGGCACCTTAAGGATCCGAGGCACCTGCAGTACGTGGCAGATGTGAACGAGT  
 CCAACGTGTACGTGGTACGCAGGGCCGAAGCTCTACGGGATGCCCACTGACTTCGGTTTCTGTGTCAA  
 GCCCAACAAGCTTCGAAATGGCCACAAGGGCTTCGGATCTTCTGCAGTGAAGATGAGCAGAGCCGACCC  
 TGCTGGCTGGCTGCCTCCGCTCTTCAAGTACGGGGTGCAGCTGTACAAGAATTACCAGCAGGCACAGT  
 CTCGCCATCTGCATCCATCTTGTGGTCCACCCCTTGGAAAGTGCCTCAGATAATACCTGGTGGC  
 CATGGACTTCTCTGGCCATGCTGGCGTGTCAATTGAGAACCCTCCGGAGGCTCTGAGTGTGGCCCTGGAG  
 GAGGCCACAGCCTGGAGGAAGAAGACAAACCACCGCCTCAGCCTGCCATGCCAGCCTCCGGCAGGACC  
 TCAGTGCAGCCATCCACCGCACCAACTCTGGTCCACGGGCGCATTTCCTGAGGAGAGCCAGCGGCT  
 TATTGGACAGCAGGGCTTGGTAGACGGCTGTTCTGCTCGGGAGAGTCAAGGAAACCCAGGGCTTT  
 GTCCTCTCTTGTGCCACCTGCAGAAAGTGAAGCATTATCTCATCTGCCAGCGAGGAGGAGGGCCGCC  
 TGTACTTCAGCATGGATGATGGCCAGACCCGCTTCACTGACCTGCTGCAGCTCGTGGAGTCCACCAGCT  
 GAACCGCGGCATCTGCCGTGCTTGTGCGCCATTGCTGCACGGGTGGCCCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC234421 representing NM\_001242442  
 Red=Cloning site Green=Tags(s)

MGKWRPGQGHHTGSVKPLSRSDAMELDLSPPHLSSPEDLCPAPGTPPGTTPRPPDTPLEEVKRSQPLLI  
 PTTGRKLRREEERRATSLPSIPNPFPELCSPPSQSPIILGGPSSARGLLPRDASRPHVVKVYSEDGACRSVE  
 VAAGATARHVCEMLVQRAHALSDETWGLVECHPHLALERGLEDHESVVEVQAAWPVGGDSRFVFRKNFAK  
 YELFKSSPHSLFPEKMVSSCLDAHTGISHEDLIQNFLNAGSFPEIQGFLQLRGSGRKLWKRFFCFLRRSG  
 LYYSTKGTSKDPRHLQYVADVNESNVYVVTQGRKLYGMPTDFGFCVKNKLRNGHKGLRIFCSEDEQSRT  
 CWLAAFRFLFKYGVQLYKNYQQAQSRHLHPSCLGSPPLRSASDNTLVAMDFSGHAGRVIIENPREALSVALE  
 EAQAWRKKTNHRLSLPMPASGTSLSAAIHRQLWFHGRI SREESQRLIGQQGLVDGLFLVRESQRNPQGF  
 VLSLCHLQKVKHYLILPSEEEGRLYFSMDDGQTRFDLLQLVEFHQLNRGILPCLLRHCCTRVAL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001242442

**ORF Size:** 1665 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\\_001242442.1](#), [NP\\_001229371.1](#)

**RefSeq Size:** 2214 bp

**RefSeq ORF:** 1668 bp

**Locus ID:** 2886

**UniProt ID:** [Q14451](#)

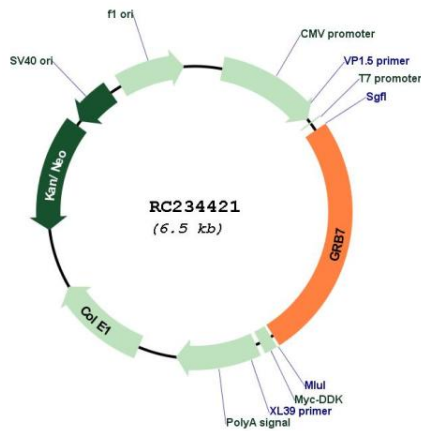
**Cytogenetics:** 17q12

**Protein Families:** Druggable Genome, Embryonic stem cells, Stem cell - Pluripotency

**MW:** 62.6 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 epidermal growth factor receptor (EGFR) and ephrin receptors. The protein plays a role in the integrin signaling pathway and cell migration by binding with focal adhesion kinase (FAK). Several transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jun 2011]

**Product images:**



Circular map for RC234421