

Product datasheet for RN203255

Grb10 (NM_001109093) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grb10 (NM_001109093) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Grb10
Synonyms:	RGD1566234
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN203255 representing NM_001109093 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGAAGCTGAGGCTCAGAAAGGATGTCAAAGTCTTTAGTGAAGATGGGACAAGCAAAGTGGTGGAGA
TTCTAACCGACATGACTGCCAGGGACCTGTGCCAGCTGCTGGTTACAAAAGTCACTGTGTGGATGACAA
CAGCTGGACTCTGGTGGAGCACCACCCACAAGTGGGACTAGAGAGGTGCCTGGAGGACCATGAGATCGTG
GTCCAAGTGGAGAGCACCATGCCAAGTGAAGTAAATTCTTATTCAGAAAGAACTATGCCAAGTACGAGT
TCTTTAAGAACCCTGTGAACCTTCTTCCGGATCAGATGGTCACCTGGTGCACGAGTCCAACGGTGGCCA
GGCCAGCTTCTGCAGAATTTCTGAACTCCAGCAGCTGCCCTGAGATCCAGGGTCTTTCAGGTGAAG
GAGGTGGGACGCAAGTCTTGAAGAAGCTGTATGTGTGCCTGCGCAGATCTGGCCTTTACTCCACCA
AGGGGACTTCAAAGGAACCCAGACACCTGCAGCTGCTGGCTGACCTCGAAGAAAGCAGCATCTTCTACCT
GATTGCCGAAAGAAGCAGTACAACGCACCCAATGAACACGGGATGTGCATCAAGCCAAACAAAGCGAAG
ATCGAGATGAAGGAGCTGCGTCTGCTGTGCCAAGATGAGCAGATCCGTAATGCTGGATGACAGCCT
TCAGACTGCTCAAGTATGGAATGCTCCTGTACCAAACTATCGCATCCCGCAGCAGAGAAAGGGTTTGGC
TCCTCCTTCAACGCGCCTATGCGCAGTGTCTGAGAATTCTCTTGTGGCCATGGATTTTTCTGGACAA
ATTGGAAGAGTGATTGATAACCCGGCTGAAGCCAGAGTCTGCCTGGAAGAGGGCCATGCCTGGCGGA
AGCGAAGCACAAGGATGAATATCCTAAGCAGCCAAAGTCCCTTCATCCTTCGACCTGAATTCGGTGT
TCACAGGACTCAGCATTGGTTCCATGGACGTATCTCTCGCGAGGAATCTCACAGGATCATCAAGCAACA
GGTCTCGTGGACGGGCTGTTCTCCTCCGTGACAGTCAAGCAATCCAAAGGCTTTCGTGCTGACGCTGT
GTCACCAGCAGAAGATTAGAACTTCCAGATCTTACCCTGCGAGGATGATGGGCAAACCTTCTCACTCT
GGATGATGGGAACACCAAGTTCTCGGATCTGATTCAGCTGGTTCGACTTCTACCAGCTCAACAAAGGCGTC
CTGCCCTGCAAGCTGAAGCACCCTGCATCCGCTGGCCTTATGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001109093
Insert Size:	1305 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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:	<u>NM_001109093.1</u> , <u>NP_001102563.1</u>
RefSeq Size:	4996 bp
RefSeq ORF:	1305 bp
Locus ID:	498416
Cytogenetics:	14q21
Gene Summary:	Adapter protein which modulates coupling of a number of cell surface receptor kinases with specific signaling pathways. Binds to, and suppress signals from, activated receptors tyrosine kinases, including the insulin (INSR) and insulin-like growth factor (IGF1R) receptors. The inhibitory effect can be achieved by 2 mechanisms: interference with the signaling pathway and increased receptor degradation. Delays and reduces AKT1 phosphorylation in response to insulin stimulation. Blocks association between INSR and IRS1 and IRS2 and prevents insulin-stimulated IRS1 and IRS2 tyrosine phosphorylation. Recruits NEDD4 to IGF1R, leading to IGF1R ubiquitination, increased internalization and degradation by both the proteasomal and lysosomal pathways. A similar role in the mediation of ubiquitination has also been suggested with INSR. Negatively regulates Wnt signaling by interacting with LRP6 intracellular portion and interfering with the binding of AXIN1 to LRP6. Positive regulator of the KDR/VEGFR-2 signaling pathway. May inhibit NEDD4-mediated degradation of KDR/VEGFR-2 (By similarity).[UniProtKB/Swiss-Prot Function]