

## Product datasheet for **RR210490**

### **Grk2 (NM\_012776) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Grk2 (NM_012776) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Grk2
Synonyms:	Adrbk1; BARK1; GRK-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RR210490 representing NM\_012776  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCGACCTGGAGCGGTACTGGCCGATGTGAGCTACCTGATGGCCATGGAGAAGAGCAAGGCCACGC  
 CGGCCGCGCGCCAGCAAGAAGATCCTGCTGCCAGAGCCAGCATCCGCAGCGTCATGCAGAAGTATCT  
 AGAGGATCGAGGAGAAGTGACCTTTGAAAAGATCTTCTCACAGAAGTTAGGATACCTGCTTTCCGGGAC  
 TTCTACCTGAACCATCTGGAAGAGGCCAAGCCCTTGGTGGAGTTCTATGAAGAGATCGAGAAATATGAGA  
 AGCTGGAGACGGAGGAGAACGTGTGGTCCGCAGCCGGGAGATCTTTGACTCCTACATCATGAAAGAACT  
 GCTGGCCTGCTCACATCCCTTTCAAAGAATGCCACGGAGCATGTCCAGGGCCACCTGGTGAAGAAGCAG  
 GTACCTCCAGATCTTCCAGCCATACATTGAGGAGATTTGTGAGAACCTCCGAGGGGATGTGTTCCACA  
 AATTCATTGAGAGTGACAAGTTCACACGGTTCTGCCAGTGAAGAATGTAGAGCTCAACATCCACCTGAC  
 CATGAATGACTTCAGTGTGCATCGAATCATCGGGCGTGGGGGCTTCGGTGAGGTCTATGGGTGCCGAAA  
 GCAGACACAGGCAAGATGTACGCCATGAAGTGTCTGGACAAGAAACGCATCAAGATGAAGCAGGGAGAGA  
 CCCTGGCTCTGAACGAGCGGATCATGCTTCCCTCGTCAGCACTGGGGACTGCCCTTATCGTGTGCAT  
 GTCATATGCATTCCACACACCAGACAAGCTCAGTTTATCCTGGATCTCATGAACGGTGGGGACCTGCAC  
 TACCACTTGTCTCAGCATGGAGTCTTCTCTGAAGCCGACATGCGCTTCTACGCAGCTGAGATCATCTGG  
 GCCTTGAACACATGCACAATCGCTTTGTAGTCTACAGGGACCTAAAGCCAGCCAACATTCCTGGATGA  
 GCATGGCCATGTGAGAATCTCAGACCTGGGCCTAGCCTGTGACTTCTCCAAGAAGAAGCCTATGCCAGT  
 GTGGGCACACACGGGTACATGGCCCCGGAAGTCTACAGAAGGGCGTGGCCTATGACAGCAGTGGCAGT  
 GGTCTCCCTGGGCTGCATGCTTCAAGTTGTTGCGGGGACACAGCCCCTTCCGGCAGCACAAAGACCAA  
 AGACAAGCATGAGATTGACCGCATGACATTGACAATGGCTGTTGAGCTGCCTGACTCCTTCTCCCTGAA  
 CTCGGATCCCTGCTGGAAGGTTTGTGTCAGAGGGATGTCAATCGGAGACTAGGCTGTCTGGGCCGTGGGG  
 CTCAAGAGATAAAAGAAAGCCCTTCTTCCGTTCCCTGGACTGGCAGATGGTCTTCTTACAGAAGTACCC  
 TCCTCCACTGATCCCCCAGCGGGGAGGTGAATGCAGCGGACGCCTTTGACATTGGCTCCTTTGATGAG  
 GAGGACACAAAAGGAATCAAGTTACTGGACAGTGACCAGGAAGTGTACCGCAACTCCCTCTCACCATCT  
 CTGAGCGGTGGCAACAGGAGGTGGCAGAGACTGTCTTTGATACCATCAATGCTGAGACAGACCGGCTGGA  
 GGCACGGAAGAAAGCCAAAAACAACAGCTGGGCCACGAGGAGGACTACGCCCTGGGTAAAGACTGCATC  
 ATGCATGGCTACATGTCCAAGATGGGCAACCCCTTCTGACCCAGTGGCAGCGGGGATACTTCTACCTGT  
 TCCCCAACCGGCTTGAGTGGAGGGGTGAAGACGAGGCTCCGCAGAGCCTCCTGACCATGGAAGAGATCCA  
 GTCGGTGAAGAGACACAGATCAAGGAACGCAAGTGTCTCCTGCTTAAGATCCGAGGTGGCAAGCAGTTT  
 GTCCTGCAGTGTGATAGTGACCTGAGCTGGTGAATGGAAAAAGAGCTGCGCGATGCTTACCGTGAGG  
 CCCAGCAGCTGGTGCAGCGAGTGCCCAAGATGAAGAACAAGCCACGCTCACCTGTGGTGGAGCTGAGCAA  
 GGTGCCACTGATTCAGCGTGGCAGTGCCAACGGCCTC

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR210490 representing NM\_012776  
Red=Cloning site Green=Tags(s)

MADLEAVLADVSYLMAMEKSKATPAARASKKILLPEPSIRSVMQKYLEDRGEVTFEKFIFSQKLGYLLFRD  
 FYLNHLEEAKPLVEFYEEIEKYEKLETEEERVVRSREIFDSYIMKELLACSHPPFSKNATEHVQGHVKKQ  
 VPPDLFQPYIEEICQNLRGDVFHFKFIESDKFTRFCQWKNVELNIHMTMDFSVHRIIGRGGFGEVYGCRK  
 ADTGKMYAMKCLDKKRIKMKQGETLALNERIMLSLVSTGDCPFIVCMSYAFHTPDKLSFILDLMNGGDLH  
 YHLSQHGVSSEADMRFYAAEIIILGLEHMHNRFFVYRDLKPANILLDEHGHVRISDLGLACDFSKKKPHAS  
 VGTGHYMAPEVLQKGVAYDSSADWFSLGCMLFKLLRGHSPFRQHKTDKKHEIDRMTLTMAVELPDSFSPE  
 LRSLLLEGLLQRDYNRRLGCLGRGAQEIKESPFFRSLDWQMVFLQKYPPPLIPRGEVNAADAFDIGSFDE  
 EDTKGIKLLDSDQELYRNFLTISERWQQEVAETVFDTINAETDRLEARKKAKNKQLGHEEDYALGKDCI  
 MHGYMSKMGNPFLTQWQRRYFYLFPNRLWRGEDEAPQSLLTMEEIQSVEETQIKERKCLLLKIRGGKQF  
 VLQCDSDPELVQWKKELRDAYREAQQLVQRVPMKNKPRSPVVELSKVPLIQRSANGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_012776

**ORF Size:** 2067 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\\_012776.1](#), [NP\\_036908.1](#)

**RefSeq Size:** 2683 bp

**RefSeq ORF:** 2070 bp

**Locus ID:** 25238

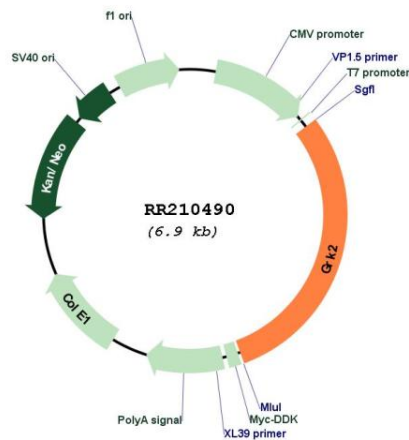
**UniProt ID:** [P26817](#)

**Cytogenetics:** 1q43

**MW:** 79.8 kDa

**Gene Summary:** catalyzes phosphorylation of the beta-adrenergic receptor; may mediate desensitization of synaptic receptors; may regulate bone formation [RGD, Feb 2006]

### Product images:



Circular map for RR210490