

## Product datasheet for **RG215129**

### GRK3 (NM\_005160) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GRK3 (NM_005160) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRK3
Synonyms:	ADRBK2; BARK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG215129 representing NM\_005160  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGACCTGGAGGCTGTGCTGGCCGATGTCAGTTACCTGATGGCCATGGAGAAGAGCAAGGCGACCC  
 CGGCCGCCCGCGCCAGCAAGAGGATCGTCTGCCGGAGCCAGTATCCGGAGTGTGATGCAGAAGTACCT  
 TGCAGAGAGAAAATGAAATAACCTTTGACAAGATTTTCAATCAGAAAATTGGTTTCTTGCTATTTAAAGAT  
 TTTTGTGTAATGAAATTAATGAAGCTGTACCTCAGGTGAAGTTTATGAAGAGATAAAGGAATATGAAA  
 AACTTGATAATGAGGAAGACCGCTTTGCAGAAGTCGACAAATTTATGATGCCTACATCATGAAGGAACT  
 TCTTCTGTTCCACATCCTTTCTCAAAGCAAGCTGTAGAACACGTACAAAGTCATTTATCCAAGAAAACA  
 GTGACATCAACTCTTTTTAGCCATACATAGAAGAAATTTGTGAAAGCCTTCGAGGTGACATTTTTCAA  
 AATTTATGAAAAGTGACAAGTTCCTAGATTTTGTGAGTGGAAAAACGTTGAATTAATATCCATTTGAC  
 CATGAATGAGTTCAGTGTGCATAGGATTATTGGACGAGGAGGATTCGGGGAGTTTATGGTTGCAGGAAA  
 GCAGACACTGGAAAAATGTATGCAATGAAATGCTTAGATAAGAAGAGGATCAAAAATGAAACAAGGAGAAA  
 CATTAGCCTTAAATGAAAGAATCATGTTGTCTCTTGTGACGACAGGAGACTGTCCTTTCATTGTATGAT  
 GACCTATGCCTTCCATACCCAGATAAACTCTGCTTTCATCCTGGATCTGATGAACGGGGGCGATTGAC  
 TACCACCTTTCACAACACGGTGTGTTCTCTGAGAAGGAGATGCGGTTTTATGCCACTGAAATCATTCTGG  
 GTCTGGAACACATGCACAATCGGTTTGTGTCTACAGAGATTTGAAGCCAGCAAAATTTCTTGGATGA  
 ACATGGACACGCAAGAATATCAGATCTTGGTCTTGCCTGCGATTTTTCCAAAAAGAGCCTCATGCGAGT  
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 GGTTCTCCCTGGGCTGCATGCTTTTCAAACCTTCTGAGAGGTACAGCCCTTTCAGACAACATAAAAACCAA  
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 GAGGATACCAAGGGATTAAGCTACTTGATTGCGACCAAGAAGTCTACAAGAAGTCCCTTTGGTCATCT  
 CTGAACGCTGGCAGCAAGAAGTAAACGAAACAGTTTATGAAGCAGTAAATGCAGACACAGATAAAATCGA  
 GGCCAGGAAGAGAGCTAAAATAAGCAACTTGGCCACGAAGAAGATTACGCTCTGGGGAAGGACTGTATT  
 ATGCACGGGTACATGCTGAAACTGGGAAACCCATTTCTGACTCAGTGGCAGCGTCTGCTATTTTTACCTCT  
 TTCCAAATAGACTTGAATGGAGAGGAGAGGAGAGTCCCGGCAAAATTTACTGACAATGGAACAGATTCT  
 CTCTGTGGAAGAACTCAAATTAAGACAAAAATGCATTTTGTTCAGAATAAAGGAGGGAAAACAATTT  
 GTCTTGCAATGTGAGAGTGATCCAGAGTTTGTGCAAGTGGAAAGAAAGATTGAACGAAACCTCAAGGAGG  
 CCCAGCGGCTATTGCGTCGTGCCCGAAGTTCTCAACAAACCTCGGTACAGTACTGTGGAGCTCCCAAA  
 GCCATCCCTCTGTACAGAAACAGCAACGGCCTC

**ACGCGT**ACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG215129 representing NM\_005160  
Red=Cloning site Green=Tags(s)

```
MADLEAVLADVSYLMAMEKSKATPAARASKRIVLPEPSIRSVMQKYLAERNEITFDKIFNQKIGFLLFKD
FCLNEINEAVPQVKFYEEIKEYEKLDNEEDRLCRSRQIYDAYIMKELSCSHPFKQAVEHVQSHLSKKQ
VTSTLTFQPYIEEICESLRGDI FQKFMESDKFTRFCQWKNVELNIHLTMNEFSVHRIIGRGGFGEVYGCRK
ADTGKMYAMKCLDKKRIKMKQGETLALNERIMLSLVSTGDCCPFIVCMTYAFHTPDKLCFILDLMNGGDLH
YHLSQHGVSSEKEMRFYATEIILGLEHMHNRFFVYRDLKPANILLDEHGHRISDLGLACDFSKKKPHAS
VGTHGYMAPEVLQKGTAYDSSADWFSLGCMLFKLLRGHSPFRQHKTDKKHEIDRMTLTVNVVLPDTFSPE
LKSLLEGLLQRDYSKRLGCHGGGSEQEVKEHSFFKGVWQHVVYLQKYPPPLIPRGEVNAADAFDIGSFDE
EDTKGIKLLDCDQELYKNFPLVISERWQQEVTETVYEAVNADTDKIEARKRAKNKQLGHEEDYALGKDCI
MHGYMLKLGPNFLTQWQRRYFYLFPNRLWRGEGESRQNL TMEQILSVEETQIKDKKCILFRKGGKQF
VLQCESDPEFVQWKKELNETFKEAQRLLRRAPKFLNKPRSGTVELPKPSLCHRNSNGL
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005160

**ORF Size:** 2064 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\\_005160.4](#)

**RefSeq Size:** 3628 bp

**RefSeq ORF:** 2067 bp

**Locus ID:** 157

**UniProt ID:** [P35626](#)

**Cytogenetics:** 22q12.1

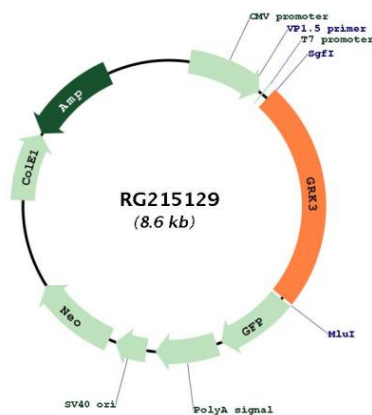
**Domains:** RGS, pkinase, S\_TK\_X, TyrKc, PH, S\_TKc

**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Chemokine signaling pathway, Endocytosis, Olfactory transduction

**Gene Summary:** The beta-adrenergic receptor kinase specifically phosphorylates the agonist-occupied form of the beta-adrenergic and related G protein-coupled receptors. Overall, the beta adrenergic receptor kinase 2 has 85% amino acid similarity with beta adrenergic receptor kinase 1, with the protein kinase catalytic domain having 95% similarity. These data suggest the existence of a family of receptor kinases which may serve broadly to regulate receptor function. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG215129