

## Product datasheet for **RG210327**

### GRK2 (NM\_001619) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GRK2 (NM_001619) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRK2
Synonyms:	ADRBK1; BARK1; BETA-ARK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG210327 representing NM\_001619  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGACCTGGAGCGGTGCTGGCCGACGTGAGCTACCTGATGGCCATGGAGAAGAGCAAGGCCACGC  
 CGGCCGCGCGCCAGCAAGAAGATACTGCTGCCGAGCCAGCATCCGAGTGTATGCAGAAGTACCT  
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 GTGCCCTCCGGATCTTCCAGCCATACATCGAAGAGATTTGTCAAACCTCCGAGGGGACGTGTTCCAGA  
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 GTCATACGCGTTCCACACGCCAGACAAGCTCAGCTTATCCTGGACCTCATGAACGGTGGGGACCTGCAC  
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 ATTTTGCAGTGCATAGCGACCTGAGCTGGTGCAGTGAAGAAGGAGCTGCGCGACGCCTACCGCGAGG  
 CCCAGCAGCTGGTGCAGCGGGTCCCAAGATGAAGAACAAGCCGCGCTCGCCCGTGGTGGAGCTGAGCAA  
 GGTGCCGCTGGTCCAGCGCGCAGTGCCAACGGCCTC

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

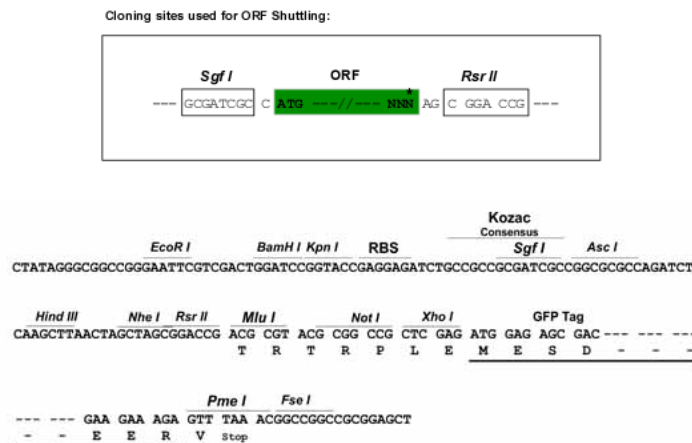
**Protein Sequence:** >RG210327 representing NM\_001619  
Red=Cloning site Green=Tags(s)

```
MADLEAVLADVSYLMAMEKSKATPAARASKKILLPEPSIRSVMQKYLEDRGEVTFEKFIFSQKLGYLLFRD
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LHSLLEGLLQRDYNRRLGCLGRGAQEVKESPFRRSLDWQMVFLQRYPPPLIPRGEVNAADAFDIGSFDE
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MHGYMSKMGNPFLTQWQRRYFYLFPNRLWRGEGEAPQSLLTMEEIQSVEETQIKERKCLLLKIRGGKQF
ILQCSDPELVQWKKELRDAYREAQQLVQRVPMKNKPRSPVVELSKVPLVQRGSANGL
```

SGPTRRRLE - GFP Tag - V

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_001619

**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\\_001619.2](#), [NP\\_001610.1](#)

**RefSeq Size:** 3603 bp

**RefSeq ORF:** 2070 bp

**Locus ID:** 156

**UniProt ID:** [P25098](#)

**Cytogenetics:** 11q13.2

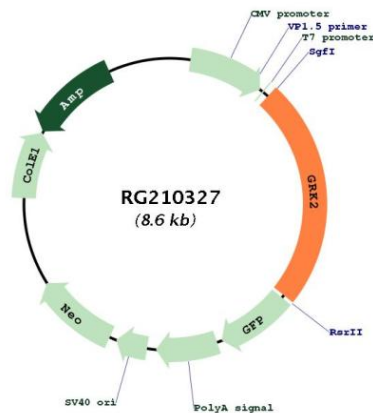
**Domains:** RGS, pkinase, S\_TK\_X, TyrKc, PH, S\_TKc

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

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

**Gene Summary:** This gene encodes a member of the G protein-coupled receptor kinase family of proteins. The encoded protein phosphorylates the beta-adrenergic receptor as well as a wide range of other substrates including non-GPCR cell surface receptors, and cytoskeletal, mitochondrial, and transcription factor proteins. Data from rodent models supports a role for this gene in embryonic development, heart function and metabolism. Elevated expression of this gene has been observed in human patients with heart failure and Alzheimer's disease. [provided by RefSeq, Sep 2017]

### Product images:



Circular map for RG210327