

## Product datasheet for **RG216602**

### GRK4 (NM\_182982) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GRK4 (NM_182982) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRK4
Synonyms:	GPRK2L; GPRK4; GRK4a; IT11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG216602 representing NM\_182982  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGCTCGAGAACATCGTGGCCAACCTCGCTGCTGCTGAAAGCGCGTCAAGGAGGATATGGCAAAAAA  
 GTGGTCGTAGTAAAAATGGAAGGAGATACTGACACTGCCTCCTGTGACCCAGTGCAGTGCAGTTAGACA  
 TTCCATTGAAAAGGATTATAGCAGTCTTTGTGACAAGCAACCGATAGGAAGACGCTCTTTCAGGCAGTTC  
 TGTGATACCAAACCCACTCTAAAGAGGCACATTGAATTCTTGGATGCAGTGGCAGAATATGAAGTTGCCG  
 ATGATGAGGACCGAAGTATTGTGGACTGTCAATCTTAGATAGATTCTTCAATGATAAGTTGGCAGCCCC  
 TTTACCAGAAATACCTCCAGATGTTGTGACAGAATGTAGATTGGGACTGAAGGAGGAGAACCCTTCCAAA  
 AAAGCCTTTGAGGAATGTACTAGAGTTGCCATAACTACCTAAGAGGGGAACCATTTGAAGAATACCAAG  
 AAAGCTCATATTTTCTCAGTTTTTACAATGGAATGGCTGAAAAGGCAACCCGTAACAAAGAACACATT  
 TAGACATTACAGAGTTCTAGGAAAAGGCGGATTTGGAGAGTTTTCGCCCTGTCAAGTGCAGCCACAGGA  
 AAAATGTATGCCTGCAAAAAGCTACAAAAAAGAATAAAGAAGAGGAAAGGTGAAGCTATGGCTCTAA  
 ATGAGAAAAGAATTCTGGAGAAAGTGCAAGTAGATTTCGTAGTTAGTTTACGCTACGCTTATGAAACCA  
 AGATGCCTTGTGCTTGGTGTCCACATTATGAATGGAGGGGATTTGAAGTTTACATTTACAACCTGGGC  
 AATCCCGCTTTGATGAGCAGAGAGCCGTTTTCTATGCTGCAGAGCTGTGTTGCGCTTGGAAAGATTTAC  
 AGAGGGAAAGAATTGTATACAGAGACTTGAAGCCTGAGAATATTTCTCTTGATGATCGTGGACACATCCG  
 GATTTTCAGACCTCGGTTTGGCCACAGAGATCCCAGAAGGACAGAGGGTTCGAGGAAGAGTTGGAACAGTC  
 GGCTACATGGCACCTGAAGTTGTCAATAATGAAAAGTATACGTTTAGTCCCGATTGGTGGGACTTGGCT  
 GTCTGATCTATGAAATGATTCAGGGACATTCTCCATTCAAAAAATACAAAGAGAAAAGTCAATGGGAGGA  
 GGTCGATCAAAGAATCAAGAATGATACCGAGGAGTATTCTGAGAAGTTTTTCAGAGGATGCCAAATCTATC  
 TGCAGGATGTTACTACCAAGAATCCAAGCAAGCGGCTGGGCTGCAGGGCGAGGGAGCGCTGGGGTGA  
 AGCAGCACCCCGTGTCAAGGACATCAACTTCAGGAGGCTGGAGGCAAACATGCTGGAGCCCCCTTCTG  
 TCCTGATCCTCATGCCGTTTACTGTAAGGACGCTCCTGGATATCGAGCAGTTCTCGCGGTGAAAGGGATC  
 TACCTGGACCCGAGATGAAGACTTCTATGCTCGGTTTGTACCAGGCTGTCTCCATCCCCTGGCAGA  
 ATGAGATGATCGAATCTGGGTGTTTCAAAGACATCAACAAAAGTGAAGTGAAGGAGCTTTGCCATTAGA  
 TCTAGACAAGAACATACATACCCCGTTTTCCAGACCAAACAGAGGCTTCTTCTATAGACTCTTCAGAAGA  
 GGGGGCTGCCTGACCATGGTCCCAGTGAGAAGGAAGTGAACCAAGCAATGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG216602 representing NM\_182982  
 Red=Cloning site Green=Tags(s)

MELENIVANSLLLKARQGGYGKKSGRSKKWEILTLPPVSQCSELRHSIEKDYSSLCDKQPIGRRLFRQF  
 CDTKPTLKRHIEFLDAVAEYEVADDEDSDCGLSILDRFFNDKLAAPLPEIPPDVVTECRLGLKEENPSK  
 KAFEECTRVAHNYLRGEPFEEYQESSYFSQFLQKWLERQPVTKNTFRHYRVLGKGGFGEVCACQVRATG  
 KMYACKKLQKKRIKKRKGEMALNEKRILEKVQSRFVVS LAYAYETKDALCLVLTIMNGDLKFHIYNLG  
 NPGFDEQRAVFYAAELCCGLEDLQRERIVYRDLKPENILLDRGHIRISDLGLATEIPEGQRVGRVGTV  
 GYMAPEVVNNEYTFSPDWWGLGLIYEMIQGHSPFKKYKEKVKWEEVDQRINKNDEEYSEKFSEDA KSI  
 CRMLLTKNPSKRLGCRGEGAAGVKQHPVFKDINFRRLEANMLEPPFCPDPHAVYCKDVLIDIEQFSAVKGI  
 YLDTADEDFYARFATGCVSIPWQNEMIESGCFKDKINKSESEEALPLDLDKNIHTPVS RPNRGGFFYRLFR  
 GGCLTMPSEKEVEPKQC

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_182982

**ORF Size:** 1734 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

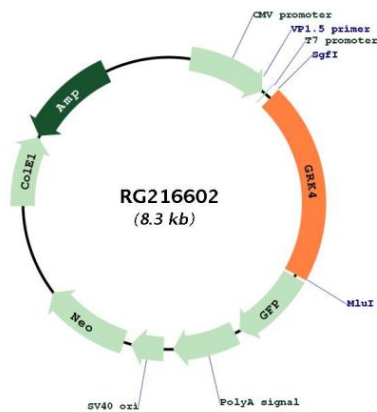
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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\\_182982.2, NP\\_892027.2](#)  
**RefSeq Size:** 2321 bp  
**RefSeq ORF:** 1737 bp  
**Locus ID:** 2868  
**UniProt ID:** [P32298](#)  
**Cytogenetics:** 4p16.3  
**Protein Families:** Druggable Genome, Protein Kinase  
**Protein Pathways:** Chemokine signaling pathway, Endocytosis  
**Gene Summary:**

This gene encodes a member of the guanine nucleotide-binding protein (G protein)-coupled receptor kinase subfamily of the Ser/Thr protein kinase family. The protein phosphorylates the activated forms of G protein-coupled receptors thus initiating its deactivation. This gene has been linked to both genetic and acquired hypertension. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2013]

**Product images:**



Circular map for RG216602