

## Product datasheet for **RC209137**

### GRK5 (NM\_005308) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GRK5 (NM_005308) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GRK5
Synonyms:	FP2025; GPRK5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC209137 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGCTGGAAAACATCGTGGCCAACACGGTCTTGCTGAAAGCCAGGGAAGGGGCGGAGGAAAGCGCA  
 AAGGGAAAAGCAAGAAGTGGAAAGAAATCCTGAAGTTCCTCACATTAGCCAGTGTGAAGACCTCCGAAG  
 GACCATAGACAGAGATTACTGCAGTTTATGTGACAAGCAGCCAATCGGGAGGCTGCTTTCCGGCAGTTT  
 TGTGAAACCAGGCCTGGGCTGGAGTGTACATTCACTTCTGGACTCCGTGGCAGAATATGAAGTACTC  
 CAGATGAAAACTGGGAGAGAAAGGGAAGGAAATTATGACCAAGTACCTCACCCAAAGTCCCCTGTTTT  
 CATAGCCCAAGTTGGCCAAGACCTGGTCTCCAGACGGAGGAGAAGCTCTACAGAAGCCGTGCAAAGAA  
 CTCTTTTCTGCCTGTGCACAGTCTGTCCACGAGTACCTGAGGGGAGAACCATTCCACGAATATCTGGACA  
 GCATGTTTTTTGACCGCTTCTCCAGTGAAGTGGTTGAAAGGCAACCCGGTACCAAAAACACTTTCAG  
 GCAGTATCGAGTCTAGGAAAAGGGGGTTCGGGGAGGCTGTGCCTGCCAGTTTCGGGCCACGGGTA  
 ATGTATGCCTGCAAGCGCTTGGAGAAGAAGAGGATCAAAAAGAGGAAAGGGGAGTCCATGGCCCTCAATG  
 AGAAGCAGATCCTCGAGAAGGTCAACAGTCAGTTTGTGGTCAACCTGGCCTATGCCTACGAGACCAAGGA  
 TGCAGTGTCTTGGTCTGACCATCATGAATGGGGTGACCTGAAGTTCACATCTACAACATGGGCAAC  
 CCTGGCTTCGAGGAGGAGCGGCCCTGTTTTATGCGGCAGAGATCCTCTGCGGCTTAGAAGACCTCCACC  
 GTGAGAACACCGTCTACCGAGATCTGAAACCTGAAAACATCCTGTTAGATGATTATGGCCACATTAGGAT  
 CTCAGACCTGGGCTTGGCTGTGAAGATCCCGAGGGAGACCTGATCCGCGCCGGGTGGGCACTGTTGGC  
 TACATGGCTCCAGAGTCTGAAACAACAGAGGTACGGCCTGAGCCCCGACTACTGGGCCCTTGGCTGCC  
 TCATCTATGAGATGATCGAGGGCCAGTCGCCGTTCCGCGCCGCAAGGAGAAGGTGAAGCGGGAGGAGGT  
 GGACCGCCGGTCTGGAGACGGAGGAGGTACTCCACAAGTCTCCGAGGAGGCAAGTCCATCTGC  
 AAGATGCTGCTCACGAAAGATGCGAAGCAGAGGCTGGGCTGCCAGGAGGAGGGGGCTGCAGAGGTCAAGA  
 GACACCCCTTCTCAGGAACATGAACCTCAAGCGCTTAGAAGCCGGGATGTTGGACCCTCCCTTCGTTCC  
 AGACCCCGCGCTGTGTACTGTAAGGACGTGCTGGACATCGAGCAGTTCTCCACTGTGAAGGGCGTCAAT  
 CTGGACCACAGACGACGACTTCTACTCCAAGTCTCCACGGGCTCTGTGTCCATCCCATGGCAAAACG  
 AGATGATAGAAACAGAATGCTTTAAGGAGCTGAACGTGTTGGACCTAATGGTACCCTCCCGCCAGATCT  
 GAACAGAAACCACCTCCGGAACCGCCCAAGAAAGGGCTGCTCCAGAGACTTTCAAGCGGCAGCATCAG  
 AACAAATCCAAGATTCGCCAGCTCCAAGACCAGTTTTAACACCACATAAACTCAAACCATGTCAGT  
 CGAACTCCACCGAAGCAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC209137 protein sequence  
 Red=Cloning site Green=Tags(s)

MELENIVANTVLLKAREGGGKRKGSKKWKEILKFPHISQCEDLRRTIDRDYCSLCKQPIGRLLFRQF  
 CETRPGLECYIQFLDSVAEYEVTPDEKLGEKKEIMTKYLTPKSPVFIGAQQVQDLVSQTEKLLQKPKCE  
 LFSACAQSVHEYL RGEFHEYLDSMFFDRFLQWKWLERQPVTKNTFRQYRVLGKGGFGEVCACQVRATGK  
 MYACKRLEKKRIKKRKGESMALNEKQILEKVNQFVVNLAYAYETKDALCLVLTIMNGGDLKFHIYNMGN  
 PGFEEERALFYAAEILCGLEDLHRENTVYRDLKPENILLDDYGHIRISDLGLAVKIPEGDLIRGRVGTG  
 YMAPEVLNNQRYGLSPDYWGLGCLYEMIEGQSPFRGRKEKVKREEVDRRVL ETEEYVSHKFSEEAKSIC  
 KMLLTKDAKQRLGCQEEGAAEVKRHPFFRNMNFKRLEAGMLDPPFVPDRAVYCKDVL DIEQFSTVKGVN  
 LDHTDDDFYSKSTGSVSI PWQNEMIE TEFC KELNVFPGNGTLPD LNRNHPPEPPKGLLQRLFKRQHQ  
 NNSKSSPSSKTSFNHHINSNHVSSNSTGSS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6070\\_b12.zip](https://cdn.origene.com/chromatograms/mk6070_b12.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_005308

ORF Size: 1770 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM\\_005308.3](#)

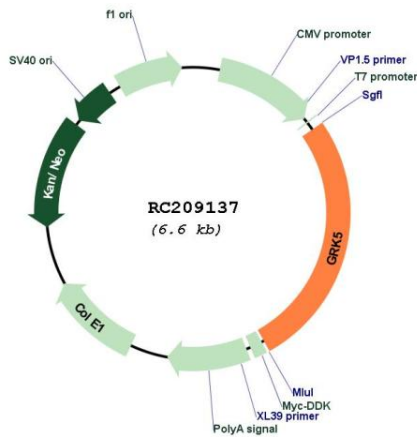
RefSeq Size: 2575 bp

RefSeq ORF: 1773 bp

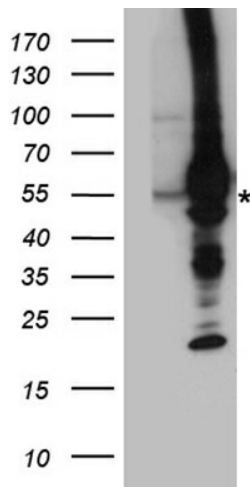
**Locus ID:** 2869  
**UniProt ID:** [P34947](#)  
**Cytogenetics:** 10q26.11  
**Domains:** RGS, pkinase, S\_TK\_X, TyrKc, S\_TKc  
**Protein Families:** Druggable Genome, Protein Kinase  
**Protein Pathways:** Chemokine signaling pathway, Endocytosis  
**MW:** 67.8 kDa

**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 their deactivation. It has also been shown to play a role in regulating the motility of polymorphonuclear leukocytes (PMNs). [provided by RefSeq, Jul 2008]

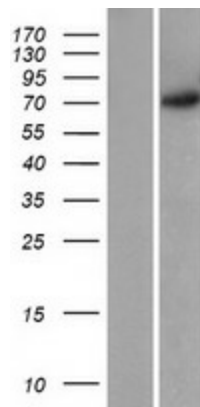
### Product images:



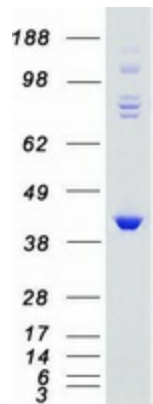
Circular map for RC209137



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GRK5 (Cat# RC209137, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GRK5 antibody (Cat# [TA890122]). Positive lysates [LY401636] (100ug) and [LC401636] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401636]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209137 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GRK5 protein (Cat# [TP309137]). The protein was produced from HEK293T cells transfected with GRK5 cDNA clone (Cat# RC209137) using MegaTran 2.0 (Cat# [TT210002]).