

## Product datasheet for **RC204139**

### **RGS14 (NM\_006480) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RGS14 (NM_006480) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RGS14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC204139 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCCAGGAAGCCCAAGCACCTGGGCGTCCCCAACGGGCGCATGTTCTGGCTGTGCAGATGGAGAGC  
 TGAGCAGCACGACGGGGCCAGGGCCAGGGCGAGGGCCGCGCAGCTCTCTCAGCATCCACAGCCTCCC  
 CAGTGGTCCCAGCAGCCCTTCCAACCGAGGAGCAGCCTGTGGCCAGCTGGGCCCTGTCTTCGAGCGG  
 CTGTTGCAGGACCCGCTGGGCTGGCTTACTTCACTGAGTTCTGAAGAAGGAGTTCAGCGCGAAAACG  
 TGACTTCTGGAAGGCCTGCGAGCGCTTCCAGCAGATCCCGCCAGCGATACCCAGCAGCTAGCTCAGGA  
 GGCCCGCAACATCTACCAGGAGTTCCTGTCCAGCCAGGCGCTGAGCCAGTGAACATCGACCGTCAGGCC  
 TGGCTTGGCGAGGAGTGTGGCCGAGCCCGGCCGACATGTTTCGGGCACAGCAGCTTCAGATCTTCA  
 ACTTGATGAAGTTCGACAGCTATGCGCGCTTCGCAAGTCCCGCTGTACCGCGAGTGCCTGCTAGCCGA  
 AGCCGAGGAGCGCCTCTGCGGGAACCTGGCTCCTCGCGCTCGGCAGCCCTGACGCCACGAGGAAGAAG  
 CCGAAGCTGAAGCCCGGGAAGTCGCTGCCGCTGGGTGTGGAGGAGTTGGGCAGCTGCCACCCGTTGAGG  
 GTCTGGGGGCCCCCTCTCCGCAAGTCTTCCGCCGGGAGCTGGGCGGGACTGCAAACGCCCTTGGC  
 CCGAGAGTCTCAGGGCTCCCTCAACTCCTCCGCCAGCCTGGACCTTGGCTTCTAGCCTTCGTCAGCAGC  
 AAATCTGAGAGCCACCGAAGAGCCTTGGGAGCACGGAGGTTGAAAGTAAAAGCCGGCCAGGGAAGTACT  
 GCTGTGTACCTGCCGATGGCACAGCCTCCTTGGCCCTGGCCAGACCTGGCCTCACCATCCGAGACAT  
 GCTGGCAGGATCTGTGAGAAACGAGGCCTCTCTACCTGACATCAAGGTCTACCTGGTGGCAATGAA  
 CAGGCCCTGGTCTGGATCAGGACTGCACCGTGGTGGCGGATCAGGAAGTGGCGTGGAAAACAGGATCA  
 CCTTCGAGCTGGAGCTGACGGCGCTGGAGCGTGGTACGAATCTCAGCCAAGCCACCAAGCGGCTGCA  
 GGAGGCGCTGCAGCCATTCTGGAGAAGCACGGCTTGAGCCCGCTAGAGGTGGTGTGCACCGGCCAGGC  
 GAGAAACAGCCTCTGGATCTGGGAAGTGTGAGCTCGTGGCGGCCAGAGACTGGTTTTGGACTCT  
 TTCCAGGTGTGAAGATCTCAAAGCCCGTGACAAATCTCCTGCCGAGCCAGGGCTGCCACCTAGAAC  
 TCAGGATAAGGCCACCCATCCCCCTCCAGCGTCCCCAGTTCTCTGGTGAAGGTGCCAGTGTGCCACT  
 GGAAAGCGGCAGACCTGTGACATCGAAGCCCTGGTGGAGCTGCTGAACCGGGTGCAGAGCAGCGGGGCC  
 ACGACCAGAGGGCCTTCTGAGGAAAGAGGACCTGGTACTTCCAGAATTTCTGCAGCTGCCCGCCAAGG  
 GCCAGCTCCGAGGAGACCCACCACAGACCAATCAGCAGCCAGCCCATCGGGGATCCTTGAACTCC  
 ACCACCGACTCAGCCCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC204139 protein sequence  
 Red=Cloning site Green=Tags(s)

MPGKPKHLGVPNGRMVLAVSDGELSSTTGPGQGEGRGSSLSIHSLPSGPSSPFPTEEQPVASWALSFER  
 LLQDPLGLAYFTEFLKKEFSAENVTFWKACERFQQIPASDTQQLAQEARNIYQEFLLSSQALSPVNI DRQA  
 WLGEVLAERPRDMFRAQQLQIFNLMKFDYARFVKSPLYRECLLAEAEGRPLREPGSSRLGSPDATRKK  
 PKLKPGKSLPLGVEELGQLPPVEGPGGRPLRKSFRRELGGTANAALRRESQGLNSSASLDLGLAFVSS  
 KSESHRSLGSTESESRPGKYCCVYLPDGTASLALARPGLTIRDMLAGICEKRLSLPDIKVYLVGNE  
 QALVLDQDCTVLADQEVRENRIITFELELTALERVVRI SAKPTKRLQEALQPILEKHGLSPLEVLHRPG  
 EKQPLDLGKLVSSVAAQRLVLDLTPGVKISKARDKSPCRSQGCPPTQDKATHPPASPSSLVKVPSSAT  
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 TTDSAL

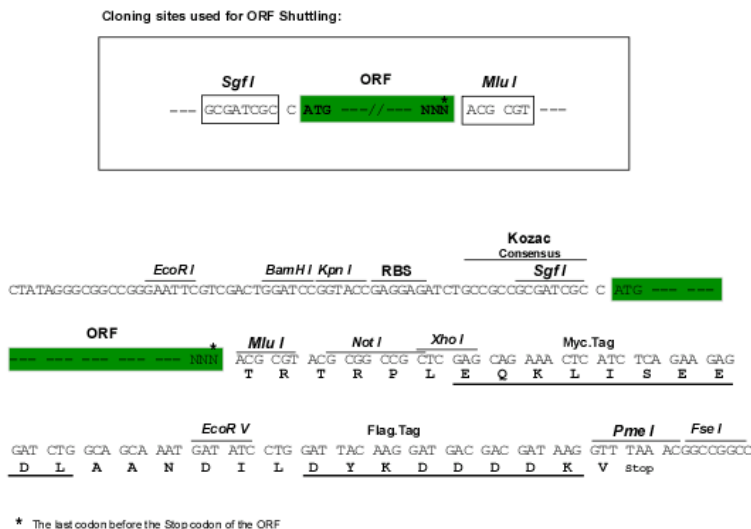
**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6568\\_b11.zip](https://cdn.origene.com/chromatograms/mk6568_b11.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_006480

**ORF Size:** 1698 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\\_006480.5](#)

**RefSeq Size:** 2418 bp

**RefSeq ORF:** 1701 bp

**Locus ID:** 10636

**UniProt ID:** [O43566](#)

**Cytogenetics:** 5q35.3

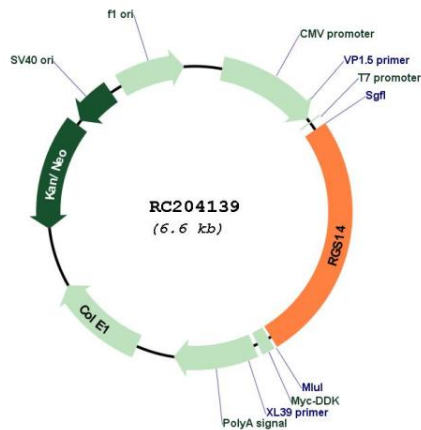
**Domains:** RGS, GoLoco, RBD

**Protein Families:** Druggable Genome

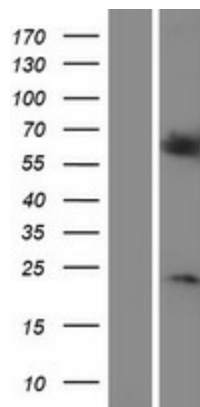
**MW:** 61.4 kDa

**Gene Summary:** This gene encodes a member of the regulator of G-protein signaling family. This protein contains one RGS domain, two Raf-like Ras-binding domains (RBDs), and one GoLoco domain. The protein attenuates the signaling activity of G-proteins by binding, through its GoLoco domain, to specific types of activated, GTP-bound G alpha subunits. Acting as a GTPase activating protein (GAP), the protein increases the rate of conversion of the GTP to GDP. This hydrolysis allows the G alpha subunits to bind G beta/gamma subunit heterodimers, forming inactive G-protein heterotrimers, thereby terminating the signal. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized. [provided by RefSeq, Jul 2008]

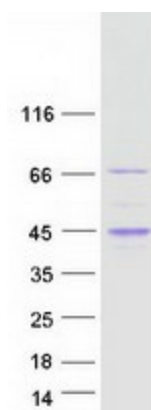
**Product images:**



Circular map for RC204139



Western blot validation of overexpression lysate (Cat# [LY416615]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204139 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RGS14 protein (Cat# [TP304139]). The protein was produced from HEK293T cells transfected with RGS14 cDNA clone (Cat# RC204139) using MegaTran 2.0 (Cat# [TT210002]).