

## Product datasheet for **RC224111**

### **RGS3 (NM\_021106) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RGS3 (NM_021106) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RGS3
Synonyms:	C2PA; PDZ-RGS3; RGP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC224111 representing NM\_021106  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTTTGAGACGGAGGCAGATGAGAAGAGGGAGATGGCCTTGAGGAAGGAAGGGCCCTGGTGCCGAGG  
 ATTCCCCACCCAGCAAGGAGCCCTCTCTGGCCAGGAGCTTCTCCAGGACAAGACCTTCCACCCAACAA  
 GGACTCCCCTTCTGGGCAGGAACCCGCTCCAGCCAAGAACCCTGTCCAGCAAAGACTCAGCTACCTCT  
 GAAGGATCCCCTCCAGGCCAGATGCTCCGCCAGCAAGGATGTGCCACCATGCCAGGAACCCCTCCAG  
 CCCAAGACCTCTCACCCTGCCAGGACCTACCTGCTGGTCAAGAACCCTGCCTCACCAGGACCTCTACT  
 CACCAAAGACCTCCCTGCCATCCAGGAATCCCCACCCGGGACCTTCCACCCTGTCAAGATCTGCCTCT  
 AGCCAGGTCTCCCTGCCAGCCAAGGCCCTTACTGAGGACACCATGAGCTCCGGGGACCTACTAGCAGCTA  
 CTGGGGACCCACCTGCGGCCCCAGGCCAGCCTTCGTGATCCCTGAGGTCCGGCTGGATAGCACCTACAG  
 CCAGAAGGCAGGGGCAGAGCAGGGCTGCTCGGGAGATGAGGAGGATGCAGAAGAGGCCGAGGAGGTGGAG  
 GAGGGGGAGGAAGGGGAGGAGGACGAGGATGAGGACACCAGCGATGACAACCTACGGAGAGCGCAGTGAGG  
 CCAAGCGCAGCAGCATGATCGAGACGGGCCAGGGGGCTGAGGGTGGCCTCTCACTGCGTGTGCAAGACTC  
 GCTGCGGCCCGGACGCACAGCGAGGGCAGCCTGCTGCAGGAGCCCCGAGGGCCCTGCTTTGCCTCCGAC  
 ACCACCTTGCACTGCTCAGACGGTGAAGGGCGCCCTCCACCTGGGGCATGCCTTCGCCCAGCACCTCA  
 AGAAAGAGCTGGGCCGCAATGGTGGCTCCATGCACCACCTTCCCTCTTCTTACAGGACACAGGAAGAT  
 GAGCGGGCTGACACCGTTGGGGATGATGACGAAGCCTCCCGGAAGAGAAAGAGCAAAAACCTAGCCAAG  
 GACATGAAGAACAAGCTGGGGATCTTCAAGCCACCTCAGAGGAAGCCCTCAAGTGGGGCGAGCTTGGAGAA  
 CAGACAAAATGATGAAGTCATTCAGCCACCTCAGAGGAAGCCCTCAAGTGGGGCGAGCTTGGAGAA  
 GCTGCTGGTTCAAAAATACGGGTTAGCAGTGTTCCAAGCCTTCCCTCGCACTGAGTTCAGTGAGGAGAA  
 CTGGAGTTCTGGTTGGCTTGTGAGGACTTCAAGAAGGTCAAGTCACAGTCCAAGATGGCATCCAAGGCCA  
 AGAAGATCTTTGCTGAATACATCGCATCCAGGCATGCAAGGAGGTCAACCTGGACTCCTACACGCGGGA  
 GCACACCAAGGACAACCTGCAGAGCGTCACGCGGGGCTGCTTCGACCTGGCACAGAAGCGCATCTTCGGG  
 CTCATGAAAAGGACTCGTACCCTCGCTTCTCCGTTCTGACCTTACCTGGACCTATTAACCAGAAGA  
 AGATGAGTCCCCCGCTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC224111 representing NM\_021106  
 Red=Cloning site Green=Tags(s)

MFETEADKREMALEEGKPGAEDSPPSKEPSPGQELPPGQDLPPNKDSPSGQEPAPSQEPLSSKDSATS  
 EGSPPGPDAPPSKDVPPCQEPPPAQDLSPCQDLPAQGEPLPHQDPLLTKDLPAIQESPTRDLPPCQDLPP  
 SQVSLPAKALTEDTMSGDLLAATGDPPAAPRPAFVIPEVRLDSTYSQKAGAEQGCSDDEDAEEAEVE  
 EGEEGEDEDEDTSDDNYGERSEAKRSSMIETGQGAEGGLSLRVQNSLRRTTHSEGSLLEPRGPFASD  
 TTLHCSDEGAASTWGMPSSTLKKELGRNGSMHHLSLFFTGHRKMSGADTVGDDEASRKRKSKNLAK  
 DMKNKLGIFRRRNESPGAPPAGKADKMMKSFKPTSEEALKWGESLEKLLVHKYGLAVFQAFLRTEFSEEN  
 LEFWLACEDFKKVKSSQSKMASKAKKIFAEYIAIQACKENVNLDYSYTRHTKDNLQSVTRGCFDLAQKRIFG  
 LMEKDSYPRFLRSDLYLDLINQKKMSPPL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6200\\_b03.zip](https://cdn.origene.com/chromatograms/mk6200_b03.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_021106

**ORF Size:** 1557 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\\_021106.3](#), [NP\\_066929.1](#)

**RefSeq Size:** 2914 bp

**RefSeq ORF:** 1559 bp

**Locus ID:** 5998

**Cytogenetics:** 9q32

**Domains:** RGS

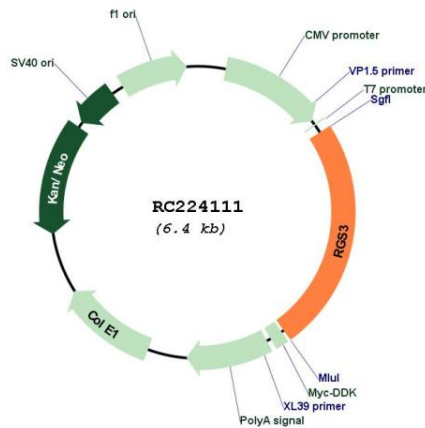
**Protein Families:** Druggable Genome

**Protein Pathways:** Axon guidance

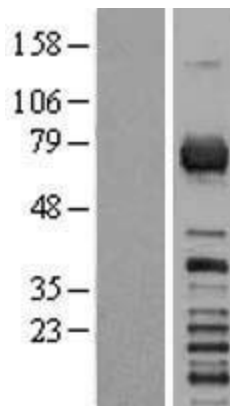
**MW:** 56.4 kDa

**Gene Summary:** This gene encodes a member of the regulator of G-protein signaling (RGS) family. This protein is a GTPase-activating protein that inhibits G-protein-mediated signal transduction. Alternative splicing and the use of alternative promoters results in multiple transcript variants encoding different isoforms. Long isoforms are largely cytosolic and plasma membrane-associated with a function in Wnt signaling and in the epithelial mesenchymal transition, while shorter N-terminally-truncated isoforms can be nuclear. [provided by RefSeq, Jan 2013]

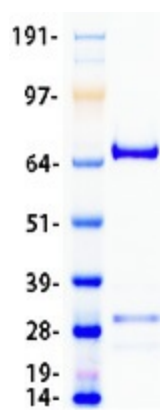
**Product images:**



Circular map for RC224111



Western blot validation of overexpression lysate (Cat# [LY402835]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224111 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RGS3 protein (Cat# [TP324111]). The protein was produced from HEK293T cells transfected with RGS3 cDNA clone (Cat# RC224111) using MegaTran 2.0 (Cat# [TT210002]).