

## Product datasheet for **RC209495**

### **RGS20 (NM\_003702) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RGS20 (NM_003702) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RGS20
Synonyms:	g(z)GAP; gz-GAP; RGSZ1; ZGAP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209495 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGCGCACGGCGGACGGAGGCGAGCCGGCCGGGGCTTCTCCCCGGCCGGCAGGGTGGACGGTGGGCTCC  
AGATGGGATCAGAGCGGATGGAGATGCGGAAGCGGCAGATGCCCGCCGCCAGGACACACCAGGCGCCGC  
CCCAGGCCAGCCCGGAGCGGGAGTCGCGGGTCCAACGCATGCTGCTTCTGCTGGTGTCTGTTGTAGC  
TGCTCGTGTCTACTGTTAGAAACCAGGAAGATCAGAGGCCACAATAGCTTCCCACGAACCTCAGAGCAG  
ATCTTCCAACCTGGGAAGAAAGCCCTGCTCCTACTCTGGAAGAAGTCAACGCCTGGGCTCAGTCATTGA  
CAAATTAATGGTCACTCCAGCAGGAAGGAATGCATTCCGTGAATTCCTCGAACAGAATTCAGTGAGGAA  
AATATGCTCTTCTGGATGGCCTGTGAGGAAGTAAAAAGGAAGCTAATAAAAACATTATTGAAGAGAAA  
CAAGGATAATCTATGAAGACTACATTTCTATACTTTCTCCTAAGGAGGTGAGCTTAGACTCCCGGGTGA  
AGAAGTGATCAACAGAAACATGGTGGAGCCATCCAACACATATTCGATGATGCTCAACTTCAGATTTAC  
ACCCTGATGCACAGAGACTCATATCCTCGATTCATGAACCTCTGCTGTCTATAAGGACTTGCTTCAGTCT  
TATCGGAGAAATCTATTGAAGCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC209495 protein sequence  
 Red=Cloning site Green=Tags(s)

MRTADGGEPAGASSPAGRV DGG LQMG SERMEMRKRQMPAAQDTPGAAPGQPGAGSRGSNACCFWCWCCCS  
 CSCLTVRNQEDQRPTIASHELRADLPTWEE SPAPTLEE VNAWAQSFDKLMVTPAGR NAFREFLRTEFSEE  
 NMLFWMACEELKKEANKNIIIEEKARIIYEDYISILSPKEVSLDSRVREVINRNMVEPSQHIFDDAQLQIY  
 TLMHRDSYPRFMNSAVYKDLLQSLSEKSIEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6525\\_d11.zip](https://cdn.origene.com/chromatograms/mk6525_d11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_003702

**ORF Size:** 723 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\\_003702.4](#), [NP\\_003693.2](#)

**RefSeq Size:** 1716 bp

**RefSeq ORF:** 726 bp

**Locus ID:** 8601

**UniProt ID:** [O76081](#)

**Cytogenetics:** 8q11.23

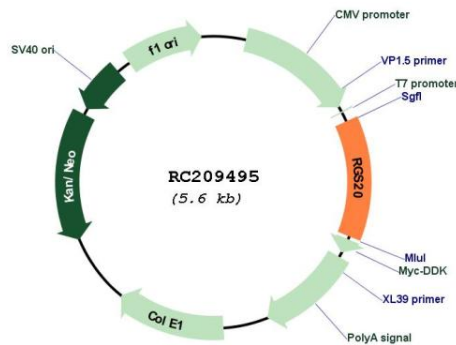
**Domains:** RGS

**Protein Families:** Druggable Genome

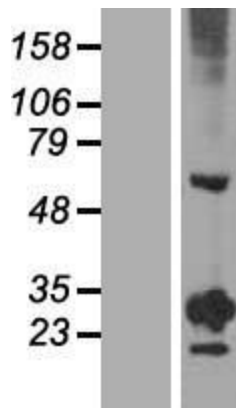
**MW:** 27.1 kDa

**Gene Summary:** The protein encoded by this gene belongs to the family of regulator of G protein signaling (RGS) proteins, which are regulatory and structural components of G protein-coupled receptor complexes. RGS proteins inhibit signal transduction by increasing the GTPase activity of G protein alpha subunits, thereby driving them into their inactive GDP-bound forms. This protein selectively binds to G(z)-alpha and G(alpha)-i2 subunits, and regulates their signaling activities. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]

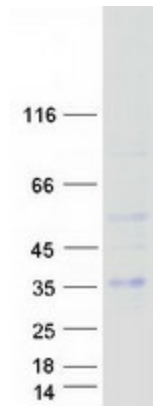
### Product images:



Circular map for RC209495



Western blot validation of overexpression lysate (Cat# [LY418490]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209495 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RGS20 protein (Cat# [TP309495]). The protein was produced from HEK293T cells transfected with RGS20 cDNA clone (Cat# RC209495) using MegaTran 2.0 (Cat# [TT210002]).