

## Product datasheet for **RG225200**

### **RGS4 (NM\_001113380) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RGS4 (NM\_001113380) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** RGS4  
**Synonyms:** RGP4; SCZD9  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG225200 representing NM\_001113380  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTGCAAAGGGCTTGCAGGTCTGCCGGCTTCTTGCTTGAGGAGTGCAAAAGATATGAAACATCGGCTAG  
 GTTTCCTGCTGCAAAAATCTGATTCCTGTGAACACAATTCTTCCACAACAAGAAGGACAAAGTGGTTAT  
 TTGCCAGAGAGTGAGCCAAGAGGAAGTCAAGAAATGGGCTGAATCACTGGAAAACCTGATTAGTCATGAA  
 TGTGGGCTGGCAGCTTCAAAGCTTCTTGAAGTCTGAATATAGTGAGGAGAATATTGACTTCTGGATCA  
 GCTGTGAAGAGTACAAGAAAATCAAATCACCATCTAAACTAAGTCCCAAGGCCAAAAAGATCTATAATGA  
 ATTCATCTCAGTCCAGGCAACCAAAGAGGTGAACCTGGATTCTTGCAACAGGGAAGACAAAGCCGGAAC  
 ATGCTAGAGCCTACAATAACCTGCTTTGATGAGGCCCAGAAGAAGATTTCAACCTGATGGAGAAGGATT  
 CCTACCGCCGCTTCTCAAGTCTCGATTCTATCTTGATTTGGTCAACCCGTCCAGCTGTGGGGCAGAAAA  
 GCAGAAAGGAGCCAAGAGTTCAGCAGACTGTGCTTCCCTGGTCCCTCAGTGTGCC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

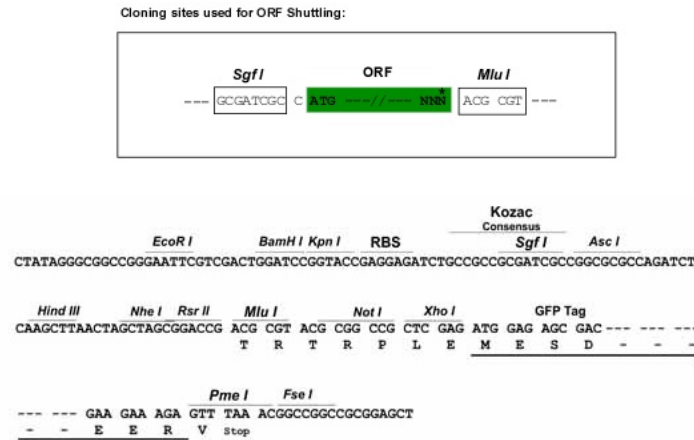
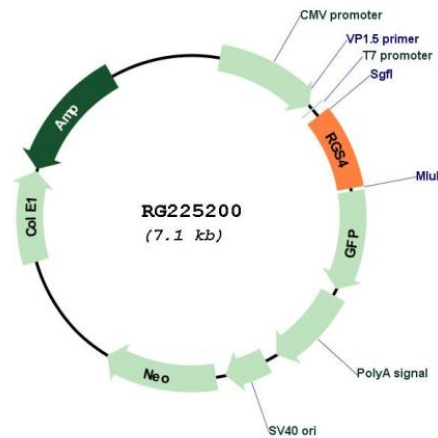
**Protein Sequence:** >RG225200 representing NM\_001113380  
 Red=Cloning site Green=Tags(s)

MCKGLAGLPASCLRSKDKMHRGFLQKSDSCEHNSSHKKDKVVICQRVSQEEVKKWAESLENLISHE  
 CGLAFAFKSEYSEENIDFWISCEEYKIKSPSKLSPKAKKIYNEFISVQATKEVNLDSCTREETSRN  
 MLEPTITCFDEAQKIFNLMEKDSYRRFLKSRFYLDL VNPSSCGAEKQKGAKSSADCASLVQCA

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001113380

**ORF Size:** 618 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\\_001113380.1](#), [NP\\_001106851.1](#)

**RefSeq Size:** 3055 bp

**RefSeq ORF:** 564 bp

**Locus ID:** 5999

**UniProt ID:** [P49798](#)

**Cytogenetics:** 1q23.3

**Protein Families:** Druggable Genome

**Gene Summary:** Regulator of G protein signaling (RGS) family members are regulatory molecules that act as GTPase activating proteins (GAPs) for G alpha subunits of heterotrimeric G proteins. RGS proteins are able to deactivate G protein subunits of the Gi alpha, Go alpha and Gq alpha subtypes. They drive G proteins into their inactive GDP-bound forms. Regulator of G protein signaling 4 belongs to this family. All RGS proteins share a conserved 120-amino acid sequence termed the RGS domain. Regulator of G protein signaling 4 protein is 37% identical to RGS1 and 97% identical to rat Rgs4. This protein negatively regulate signaling upstream or at the level of the heterotrimeric G protein and is localized in the cytoplasm. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2008]