

Product datasheet for **RG204139**

RGS14 (NM_006480) Human Tagged ORF Clone

Product data:

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|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | RGS14 (NM_006480) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | RGS14 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>RG204139 representing NM_006480
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCAGGAAGCCAAGCACCTGGGCGTCCCAACGGGCGCATGTTCTGGCTGTGCAGATGGAGAGC
 TGAGCAGCACGACGGGGCCAGGGCCAGGGCGAGGGCCGCGGAGCTCTCTCAGCATCCACAGCCTCCC
 CAGTGGTCCCAGCAGCCCTTCCCAACCGAGGAGCAGCCTGTGGCCAGCTGGGCCCTGTCTTCGAGCGG
 CTGTTGCAGGACCCGCTGGGCTGGCTTACTTCACTGAGTTCTGAAGAAGGAGTTCAGCGCGAAAAACG
 TGACTTCTGGAAGGCCTGCGAGCGCTTCCAGCAGATCCCGCCAGCGATACCCAGCAGCTAGCTCAGGA
 GGCCCGCAACATCTACCAGGAGTTCCTGTCCAGCCAGGCGCTGAGCCAGTGAACATCGACCGTCAGGCC
 TGGCTTGGCGAGGAGTGTGGCCGAGCCCGGCCGACATGTTTCGGGCACAGCAGCTTCAGATCTTCA
 ACTTGATGAAGTTCGACAGCTATGCGCGCTTCGCAAGTCCCGCTGTACCGCGAGTGCCTGCTAGCCGA
 AGCCGAGGAGCGCCTCTGCGGGAACCTGGCTCCTCGCGCTCGGCAGCCTGACGCCACGAGGAAGAAG
 CCGAAGCTGAAGCCCGGGAAGTCGCTGCCGCTGGGTGTGGAGGAGTTGGGGCAGCTGCCACCCGTTGAGG
 GTCTGGGGGCCCCCTCTCCGCAAGTCTTCCGCCGGGAGCTGGGCGGGACTGCAAACGCCCTTGGC
 CCGAGAGTCTCAGGGCTCCCTCAACTCCTCCGCCAGCCTGGACCTTGGCTTCTAGCCTTCGTCAGCAGC
 AAATCTGAGAGCCACCGAAGAGCCTTGGGAGCACGGAGGTTGAAAGTGAAGCCCGCCAGGGAAGTACT
 GCTGTGTACCTGCCGATGGCACAGCCTCCTTGGCCCTGGCCAGACCTGGCCTCACCATCCGAGACAT
 GCTGGCAGGATCTGTGAGAAACGAGGCCTCTCTACCTGACATCAAGGTCTACCTGGTGGCAATGAA
 CAGGCCCTGGTCTGGATCAGGACTGCACCGTGTGGCGGATCAGGAAGTGGCGTGGAAAAACAGGATCA
 CCTTCGAGCTGGAGCTGACGGCGCTGGAGCGTGGTACGAATCTCAGCCAAGCCACCAAGCGGCTGCA
 GGAGGCGCTGCAGCCATTCTGGAGAAGCACGGCTTGGAGCCGCTAGAGGTGGTGTGTCACCGGCCAGGC
 GAGAAACAGCCTCTGGATCTGGGAAGTGTAGTGTGCTCGGTGGCGGCCAGAGACTGGTTTTGGACTCT
 TTCCAGGTGTGAAGATCTCAAAGCCCGTGACAAATCTCCTGCCGAGCCAGGGCTGCCACCTAGAAC
 TCAGGATAAGGCCACCCATCCCCCTCCAGCGTCCCCAGTTCTCTGGTGAAGGTGCCAGTGTGCCACT
 GGAAAGCGGCAGACCTGTGACATCGAAGGCCTGGTGGAGCTGCTGAACCGGGTGCAGAGCAGCGGGGCC
 ACGACCAGAGGGCCTTCTGAGGAAAGAGGACCTGGTACTCCAGAATTTCTGCAGCTGCCCGCCCAAGG
 GCCCAGCTCCGAGGAGACCCACCACAGACCAATCAGCAGCCAGCCCATCGGGGATCCTTGAACTCC
 ACCACCGACTCAGCCCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG204139 representing NM_006480
 Red=Cloning site Green=Tags(s)

MPGKPKHLGVPNGRMVLAUSDGELSSTTGPGQGEGRGSSLSIHSLSPSGPSSPFTEEQPVASWALSFER
 LLQDPLGLAYFTEFLKKEFSAENVTFWKACERFQQIPASDTQQLAQEARNIYQEFLLSSQALSPVNIQRQA
 WLGEVLAEPDMFRAQQLQIFNLMKFDYSYARFVKSPLYRECLLAEAGRPLREPGSSRLGSPDATRKK
 PKLKPGKSLPLGVEELGQLPPVEGPGGRPLRKSFRRELGGTANAALRRESQGSLSNSSASLDLGFVSS
 KSESHRSLSGSTEGESESRPGKYCCVYLPDGTASLALARPGLTIRDMLAGICEKRGSLSPDIKVYLVGNE
 QALVLDQDCTVLAQEVRENRITFELELTALERVVIRISAKPTKRLQEALQPILEKHGLSPLEVLVHRPG
 EKQPLDLGKLVSSVAAQRLVLDLTPGVKISKARDKSPCRSQGCPPTQDKATHPPASPSSLVKVPSSAT
 GKRQTCIEGLVELLNVRQSSGAHDQRGLLRKEDLVLEFLQLPAQGPSSEETPPQTKSAAQPIGGLNS
 TTDSAL

TRTRPLE - GFP Tag - V

Restriction Sites:

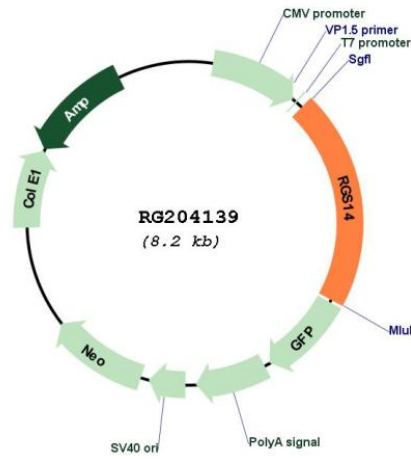
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



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: | <ol style="list-style-type: none">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 |
| 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] |