

## Product datasheet for **RG215927**

### **RGS9 (NM\_003835) Human Tagged ORF Clone**

#### **Product data:**

|                                  |                         |
|----------------------------------|-------------------------|
| <b>Product Type:</b>             | Expression Plasmids     |
| <b>Tag:</b>                      | TurboGFP                |
| <b>Symbol:</b>                   | RGS9                    |
| <b>Synonyms:</b>                 | PERRS; RGS9L            |
| <b>Mammalian Cell Selection:</b> | Neomycin                |
| <b>Vector:</b>                   | pCMV6-AC-GFP (PS100010) |
| <b>E. coli Selection:</b>        | Ampicillin (100 ug/mL)  |



**ORF Nucleotide Sequence:** >RG215927 representing NM\_003835  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGACAATCCGACACCAAGGCCAGCAGTACAGGCCGAGGATGGCATTCTCCAAAAGATTGAAGCGCTCG  
 TGAAGGACATGCAGAACCAGAGACAGGGTCCGAATGCAGAACCAGAGGGTCTGGTCACCAGCGTTCC  
 TCATGCCATGACAGGAAGTGATGTTCTGCAATGGATCGTCCAGCGCTTTGGATCTCCAGTCTGGAGGCA  
 CAGAACTTGGGCAACTTTATTGTCAAGTATGGCTACATTTACCCCTGCAAGACCCCAAGATCTCATTCT  
 TCAAGCCTGATGGCAGCCTCTACAGATTTACAGACCGTATTTCTGGCCACCCAGCAGTGGCCAGCTGA  
 AGATAACCGATTACGCCATCTATCTGGCCAAGCGAAATATCAAAAAGAAAGGGATTTTGGAAAGAAATGAA  
 AAGGAAAATTACAATTTCTGAACCAAAAAATGAACTATAAGTGGGACTTTGTCAATTATGCAGGCCAAAG  
 AGCAGTACAGGGCTGGAAGGAGAGGAACAAGCAGACAGATATGCCCTGGACTGCCAGGAGAAGGCATA  
 CTGGCTGGTGCACCGATGCCCTCCTGGAATGGACAATGTGCTGGACTACGGCTGGACCGAGTGACCAAT  
 CCGAATGAAGTCAAGGTAACAGAAACAACAGTCGTTGCTGTCAAAAAGAGATCATGTATTACCAAC  
 AGGCCTTGATGAGGTCCACAGTGAAGTCTTCTGTGTCCTGGGAGGGATTGTGAAATACAGTGAGCAGTT  
 CTCATCCAACGATGCCATCATGTGAGGCTGCCCTCCCGAGCAACCCCTGGATCACCAGTGACACCCAGTTC  
 TGGGACTTAAATGCCAAATTGGTGGAAATCCCAACCAAGATGCGAGTGGAAACGATGGGCCTTCAACTTCA  
 GCGAATTGATCCGAGACCCCAAGGTGACAGAGCTTCCAGTACTTCCCTCAAGAAAGAAATTCAGTGGAGA  
 GAATCTGGGATTCTGGGAAGCCTGCGAGGATCTGAAGTATGGAGATCAGTCCAAAGTCAAGGAGAAAGCA  
 GAGGAGATTACAAGCTGTTCTGGCCCGGGGCGAGGCGCTGGATCAACATAGATGGCAAAACCATGG  
 ACATCAGTGAAGGGCTGAAGCACCACCCACCGCTATGTGCTGGACGCGCACAAACCCACATTTACAT  
 GCTCATGAAGAAGGATTCTTATGCTCGCTATTTAAATCTCCGATCTATAAGGACATGCTGGCCAAAGCT  
 ATTGAACCTCAGGAAACCAAGAAAAGCTCCACCCTCCCTTTTATGCGGCGTCACCTGCGCTCCAGCC  
 CAAGCCCTGTATCCTGAGACAGTGAAGAGGAAGCAAGGCCGAGAGCAGCAACACTGTGGACAT  
 CACCCAGCCGGGCCAGCACATGGCTCCAGCCCCATCTGACCGTGTACACCGGACCTGCATGCCCCCG  
 TCTCCTTCTAGCCCTTCTCCTCCTCTGCGCTCCCGCAGGAAGCCTTTCGCTCAGCCAGCCGCTTCA  
 TCCGCGCAGCCAGCACCATCTGCCCTCAGCATCAGAGTGGCCTTGGAGAGCTCATCGGGCTTGGAG  
 GCAGAAAGGGGAGTGCAGCGGCTCATGGCCCCCGTGGGCCCTCTGTACCGAGAGCAGCAGGCGCTCC  
 CTCGACACCTCCTGGCTCGCAGCCGGCCAGGCCCCCTTAAGGCCCGCATGGCTCTGTCTTACGCA  
 GGTTTCTGAGACGAGGCTGTCTGGCTCAGCTGTCTTGGCAGGCTCTACCCAAGTGCCCTGCTGTGTC  
 CCACGGGAGGGTGCAGCCCTGGGGACGTGGGCCAGCAGCTGCCACGATTGAAATCCAAGAGAGTAGCA  
 AACTTTTCCAGATCAAAATGGATGTGCCACGGGGAGCGGACCTGCTTGATGGACTCGGAGGATGCTG  
 GAACAGGAGAGTCGGGTGACCGGCCACAGAAAAGGAGGTATCTGCCCTGGGAGAGCCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG215927 representing NM\_003835  
 Red=Cloning site Green=Tags(s)

MTIRHQGQYRPRMAFLQKIEALVKDMQNPETGVRMQNQRVLVTSVPHAMTGSDVLQWIVQRLWISSLEA  
 QNLGNFIVRYGIYPLQDPKNLILKPDGSLYRFQTPYFWPTQQWPAEDTDYAIYLAQRNIKKKILEEYE  
 KENYNFLNQKMNKWDVIMQAKEQYRAGKERNKADRYALDCQEKAYWL VHRCPGMDNVLDYGLDRVTN  
 PNEVKVNQQTVVAVKKEIMYYQALMRSTVKSSVSLGGIVKYSEQFSSNDAIMSGCLPSNPWITDDTQF  
 WDLNAKLVEIPTKMRVERWAFNFSILIRDPKGRQSFQYFLKKEFSGENLGFWEACEDLKYGDQSKVKEKA  
 EEIYKFLFAPGARWINIDGKTMIDITVGLKHPHRYVLDAAQTHIYMLMKKDSYARYLKSPIYKDLAKA  
 IEPQETTKSSSTLPFMRRHLRSPSPVILRQLEEEAKAREAANTVDITQPGQHMAPSPHLTVYTGTCTMPP  
 SPSSPFSSCSRPRKPFASPSRFIRRPSTTICPSPIRVALESSSGLEQKGECSGSMAPRGPSVTESEAS  
 LDTSWPRSRPRAPKARMALSFSRFLRRGLASPVFARLSPKCPAVSHGRVQPLGDVGQQLPRLKSKRVA  
 NFFQIKMDVPTGSGTCLMDESDAGTGESGDRATEKEVICPWESL

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

## Cloning Scheme:



**ACCN:** NM\_003835

**ORF Size:** 2022 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.

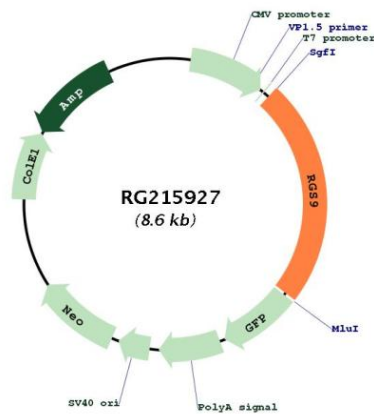
**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_003835.4](#)

**RefSeq Size:** 2447 bp

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RefSeq ORF:       | 2025 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Locus ID:         | 8787                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| UniProt ID:       | <a href="#">O75916</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Cytogenetics:     | 17q24.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Domains:          | RGS, G-gamma                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Protein Families: | Druggable Genome                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Gene Summary:     | This gene encodes a member of the RGS family of GTPase activating proteins that function in various signaling pathways by accelerating the deactivation of G proteins. This protein is anchored to photoreceptor membranes in retinal cells and deactivates G proteins in the rod and cone phototransduction cascades. Mutations in this gene result in bradyopsia. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Sep 2009] |

### Product images:



Circular map for RG215927