

## Product datasheet for **SC123871**

### **RGS1 (NM\_002922) Human Untagged Clone**

#### **Product data:**

**Product Type:** Expression Plasmids  
**Product Name:** RGS1 (NM\_002922) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** RGS1  
**Synonyms:** 1R20; BL34; HEL-S-87; IER1; IR20  
**Vector:** pCMV6-XL4  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**Cell Selection:** None  
**Fully Sequenced ORF:**

>OriGene ORF sequence for NM\_002922 edited  
ATGCCAGGAATGTTCTTCTCTGCTAACCCAAAGGAATTGAAAGGAACCACTCATTCACTT  
CTAGACGACAAAAATGCAAAAAAGGAGGCCAAAGACTTTTGGAAATGGATATGAAAGCATA  
CTGAGATCTATGATCCCACATCTGGAATCTGGAATGAAATCTTCCAAGTCCAAGGATGTA  
CTTTCTGCTGCTGAAGTAATGCAATGGTCTCAATCTCTGGAAAACTTCTTGCCAACCAA  
ACTGGTCAAAATGTCTTTGGAAGTTTCTAAAGTCTGAATTCAGTGAGGAGAATATTGAG  
TTCTGGCTGGCTTGTGAAGACTATAAGAAAACAGAGTCTGATCTTTTGCCTGTAAAGCA  
GAAGAGATATATAAAGCATTTGTGCATTCAGATGCTGCTAAACAAATCAATATTGACTTC  
CGCACTCGAGAATCTACAGCCAAGAAGATTAAGCACCAACCCACGTGTTTTGATGAA  
GCACAAAAAGTCATATATACTCTTATGGAAAAGGACTCTTATCCCAGTTCTCAATCA  
GATATTTACTTAAATCTTCTAAATGACCTGCAGGCTAATAGCCTAAAGTGA

#### **5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_002922 unedited  
ATAGGGCGGCCGGAATTCGGCACCAGCCAAAGTTAGACAAAATGCCAGGAATGTTCTTC  
TCTGCTAACCCAAAGGAATTGAAAGGAACCACTCATTCACTTCTAGACGACAAAAATGCAA  
AAAAGGAGGCCAAAGACTTTTGGAAATGGATATGAAAGCATACTGAGATCTATGATCCCA  
CATCTGGAATCTGGAATGAAATCTTCCAAGTCCAAGGATGTAATTTCTGCTGCTGAAGTA  
ATGCAATGGTCTCAATCTCTGGAAAACTTCTTGCCAACCAAACCTGGTCAAAATGTCTTT  
GGAAGTTTCTAAAGTCTGAATTCAGTGAGGAGAATATTGAGTTCTGGCTGGCTTGTGAA  
GACTATAAGAAAACAGAGTCTGATCTTTTGCCTGTAAAGCAGAAGAGATATATAAAGCA  
TTTGTGCATTCAGATGCTGCTAAACAAATCAATATTGACTTCCGCACTCGAGAATCTACA  
GCCAAGAAGATTAAGCACCAACCCACGTGTTTTGATGAAGCACAAAAAGTCATATAT  
ACTCTTATGGAAAAGGACTCTTATCCCAGTTCTCANATCAGATATTTACTTAAATCTT  
CTAAATGACCTGCAGGCTAATAGCCTAAAGTACTGGTCCCTGGCTGAAGGGAATTAACA  
GATAGTATCAAGCGCAGAAGGAATGTGCCAGTATGGCTCCCTGAGTGAACAGCTTGGCCT  
TTTTTGGTGTCTTGACAGGCC



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<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_002922 unedited ACTGGCACATTCCTTCTGCGCTTGATACTATCTGTTAATTCCTTCAGCCAGGGACCAGT CACTTTAGGCTATTAGCCTGCAGGTCATTTAGAAGATTTAAGTAAATATCTGATTTGAGG AACCTGGGATAAGAGTCTTTTTCCATAAGAGTATATATGACTTTTTGTGCTTCATCAAAA CACGTGGGGTGGTGTCTTAATCTTCTGGCTGTAGATTCTCGAGTGCAGGAAAGTCAATA TTGATTTGTTTAGCAGCATCTGAATGCACAAATGCTTTATATATCTCTTCTGCTTACAG GGCAAAAAGATCAGACTCTGTTTTCTTATAGTCTTCACAAGCCAGCCAGAAGTCAATATTC TCCTCACTGAATTCAGACTTTAGGAAACTTCAAAGACATTTTGACCAGTTTGGTTGGCA AGAAGTTTTCCAGAGATTGAGACCATTGCATTACTTCAGCAGCAGAAAGTACATCCTTG GACTTGGAAGATTTCAATCCAGATTCCAGATGTGGGATCATAGATCTCAGGTATGCTTTC ATATCCATTCCAAAAGTCTTTGGCCTCCTTTTTGCATTTGTGCTCTAGAAGTGAATGA GTGGTTCCTTTCAATTCCTTTGGGTTAGCAGAGAAGAACATTCCTGGCATTGTGCTAAC TTTGGCTGGTGCCGAATTCGCGGCCCTATAGTGAGTCGTATTACAAAATTCTGACGG TTCATAAACGAGCTCTG
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_002922
<b>OTI Disclaimer:</b>	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.  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. <a href="#">More info</a>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_002922.3</a> , <a href="#">NP_002913.3</a>
<b>RefSeq Size:</b>	1403 bp
<b>RefSeq ORF:</b>	630 bp
<b>Locus ID:</b>	5996

UniProt ID: [Q08116](#)

Cytogenetics: 1q31.2

Domains: RGS

**Gene Summary:** This gene encodes a member of the regulator of G-protein signalling family. This protein is located on the cytosolic side of the plasma membrane and contains a conserved, 120 amino acid motif called the RGS domain. The protein attenuates the signalling activity of G-proteins by binding to activated, GTP-bound G alpha subunits and acting as a GTPase activating protein (GAP), increasing 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. [provided by RefSeq, Jul 2008]