

Product datasheet for **SC117457**

RGS6 (NM_004296) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RGS6 (NM_004296) Human Untagged Clone
Tag:	Tag Free
Symbol:	RGS6
Synonyms:	GAP; HA117; S914
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC117457 sequence for NM_004296 edited (data generated by NextGen Sequencing)

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ATGGCTCAAGGATCCGGGGATCAAAGAGCAGTGGGGGTTGCTGACCCAGAGGAGAGTTCT
CCAAACATGATCGTTTACTGCAAATTTGAAGACATCATTACAAAGATGCAAGATGACAAG
ACAGGGGGTGTGCCATCAGAACAGTCAAGAGCTTTCTCTCCAAATCCCCAGTGTGTC
ACAGGTACTGACATTGTGCAGTGGCTTATGAAGAACCTTCCATTGAGGACCCAGTTGAA
GCAATACACTTGGGGAGCCTTATCGCTGCCAGGGTACATCTTCCAATCTCAGACCAT
GTTCTCACCATGAAGGATGATGGCACCTTTTATCGTTTCCAGGCTCCGTAATTCTGGCCT
TCGAACTGCTGGGAACCTGAAAACACTGACTATGCCATCTATCTCTGTAAGAGGACAATG
CAAAATAAAGCAAGGCTGGAACCTGGCAGATTATGAAGCAGAAAACCTTAGCAAGACTCCAG
AGGGCCTTTGCGAGGAAGTGGGAATTCATCTTTATGCAAGCAGAAGCACAAGTAAAGATT
GACCGAAAAAAGACAAGACAGAAAGGAAAAATTTGGATAGTCAAGAACGAGCCTTTTGG
GATGTCCACAGGCCTGTGCCAGGCTGTGTGAACACAACAGAAATGGATATCCGAAAATGT
CGACGTTTGAAGAATCCACAAAAGGTTAAAAAGTCCGTGTATGGCGTGACTGAAGAGTCC
CAGGCACAGAGCCCGGTGCATGTACTCAGCCAACCAATCAGGAAAACAACAAAAGAGGAC
ATCCGGAAAACAGATAACATTTTTGAACGCACAGATCGACAGACATTGTTTGAAAATGTCC
AAAGTGGCTGAAAGTTTAAATGCCTACACGGAACAATATGTGGAATATGACCCCTTGATA
ACACCAGCTGAGCCATCCAACCTTGGATCAGCGATGACGTTGCTTTGTGGGACATAGAG
ATGAGCAAAGAGCCCAGCCAACAGCGAGTAAAAAGATGGGGCTTCTTTTCGATGAGATA
TTGAAGGACCAGGTGGGGCGGGACCAGTTTCTACGATTCTGGAGTCCGAATTCAGTTCA
GAAAACCTCAGTTTCTGGCTGGCTGTCCAAGATCTTAAGAAAACCCCTACAGGATGTG
GCCAAGAGGGTAGAAGAAATCTGGCAAGAGTTTCTGGCTCCAGGGGCTCCAAGTGAATC
AACCTGGATTCTCACAGCTATGAGATAACCAAGTCAAAATGTCAAAGATGGAGGGAGAT
ACATTTGAAGACGCCAGGAGCACATCTACAAGCTGATGAAGAGTGACAGCTATGCCCGC
TTCTCCGGTCAAATGCTTACCAGGATTTGCTGCTGGCCAAGAAGAAGGGAAAGTCGCTG
GCGGGCAAGCGCCTCACGGGCTGATGCAGTCCTCTGA

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Clone variation with respect to NM_004296.5
546 g=>a

5' Read Nucleotide Sequence: >OriGene 5' read for NM_004296 unedited

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CTATAGGGCGGCCGGAATTCGCACGAGGGCCGCGCTCCTCGCGGGCCCGGGGCTTCGC
TCTTCGCTCGCTGAGCCCTGCGCTCGCCACCACGGAACTCGGAAAGAGGAGGGCAGGC
TGTGGGGAGCGCGCGGAGACGGACTAGACTTCCCCTCCGCCCAAGAGGCTGCCGGTC
CCCGGTTCCCTGGGCTTCTCCAGCTTTATCATGAACCTGGCGCAAGGTTGGCTTTAGGAA
AAATTCGGAGCCAGAGGGAGAGTCAAGGCAATTTCTTGGTTGCTAAGTGTGAGTGAAGA
CACTCAGGATGGCTCAAGGATCCGGGGATCAAAGAGCAGTGGGGTTGCTGACCCAGAGG
AGAGTTTCCAAACATGATCGTTTACTGCAAATTTGAAGACATCATTACAAAGATGCAAG
ATGACAAGACAGGGGTGTGCCATCAGAACAGTCAAGAGCTTTCTCTCCAAATCCCCA
GTGTCGTACAGGTAAGTACTGACATTGTGCAGTGGCTTATGAAGAACCTTTCCATTGAGGACC
CAGTTGAAGCAATACACTTGGGGAGCCTTATCGCTGCCAGGGCTACATCTTTCCAATCT
CAGACCATGTTCTCACCATGAAGGATGATGGCACCTTTTATCGTTTCCAGGCTCCGTA
TCTGGCCTTCGAACTGCTGGGAAACCTGAAACACTGACTATGCCATCTATCTCTGNTAGA
AGGACATGCAAAATTAAGCAAGGCTGGAACCTGGCAGATTATGAAGCAAATACTTAGCAAG
ATCCAAAGGGCCTTTGCGAGGAAGTGGGATTCATCTTATGCAAGCAGATCCAGTTAAGA
TGCCGAAAAAGACAGACAGAAGGAAATTTGGATAGT

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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_004296 unedited CTATGGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTGGGTTCAA GTCATTTATTTTTAAACTGTACCAGCATGTTTGGTTCTGGGGTCCAATCCCACATTCCA GAAAAATAAACTAAAGAGAACCACATGCACTAAGAGGAGGCCCTCCGATGAGTCCGCGA TCATGCGGTGAGTGGGCTTAAAGTATACAACAGGGACCCCTGGTATGGAGCAGGGCCTTC CCTTCCCAGACAGCTGACAGCAGCTGGCTCTGAGCCCTCATCGGGGCTGGGAGAGGGCC AAGCCCTGGTCATTTGGACCCTGTCCCGTATAGACCCGGGCCCTTTATTGCTACATTTG CTACTTTGCTACTTTATGGCCCTGGGTCTAGCCAGGGATGCCTTATCACTGGGTGGC ACTAAAGAGTAGGCTGCTGGCATCTGCTGATGCTATGGTTACACGAGCACAGGCCCTCT TCAGAGGGCCCCATGGTGAAGCTATTACCGACTCGTATGGCCCTATTCAACTGACCCCCA TGGCCTTTGCTACATATTCAACTCGGCGCCACCCCTTTTGAAGCTGGTGGCGCATTAT CTCCCCCCTCCACAGTTCCACCTCCTGTACCTTGCAGCAAACCTTTCTTAATACTACA ATCTTGACGGGCCAACGGCACCAGAGCCCTTAATCCTCTTCCCTTCTGGGAAGGCTC TCCTGGCGCGGGCTTCCGACCCATTCTCTGGCACCAACCCGACGGCGCCCTCAAGG AAAACTTACCTTCTTCAAGCAGGTGACCACCCGGCGGCCCTTCTTGTCAACGCC CGCTCGCGCCGAATTTCCAACCCACCATTTCCCGCCGACCCACCCTGGAATCTGCC CCCCAGATTCCACTCTCCACACCCGCCACACCTGACAAAGCTACTCCAGTACGCTGA CCCCTTCTACAACCTAG
Restriction Sites:	NotI-NotI
ACCN:	NM_004296
Insert Size:	4700 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<u>NM_004296.3</u> , <u>NP_004287.3</u>
RefSeq Size:	3105 bp
RefSeq ORF:	1419 bp
Locus ID:	9628
UniProt ID:	<u>P49758</u>
Cytogenetics:	14q24.2
Domains:	RGS, DEP, G-gamma

Protein Families: Druggable Genome

Gene Summary: This gene encodes a member of the RGS (regulator of G protein signaling) family of proteins, which are defined by the presence of a RGS domain that confers the GTPase-activating activity of these proteins toward certain G alpha subunits. This protein also belongs to a subfamily of RGS proteins characterized by the presence of DEP and GGL domains, the latter a G beta 5-interacting domain. The RGS proteins negatively regulate G protein signaling, and may modulate neuronal, cardiovascular, lymphocytic activities, and cancer risk. Many alternatively spliced transcript variants encoding different isoforms with long or short N-terminal domains, complete or incomplete GGL domains, and distinct C-terminal domains, have been described for this gene, however, the full-length nature of some of these variants is not known.[provided by RefSeq, Mar 2011]

Transcript Variant: This variant (2) lacks the in-frame penultimate coding exon compared to variant 1. This results in a shorter isoform (2, also known as RGS6Lalpha2), missing an 18 aa protein segment compared to isoform 1.