

Product datasheet for **RC208700**

RGS4 (NM_005613) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RGS4 (NM_005613) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RGS4
Synonyms: RGP4; SCZD9
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC208700 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTGCAAAGGGCTTGCAGGTCTGCCGGCTTCTTGCTTGAGGAGTGCAAAAGATATGAAACATCGGCTAG
 GTTTCCTGCTGCAAAAATCTGATTCCTGTGAACACAATTCTTCCACAACAAGAAGGACAAAGTGGTTAT
 TTGCCAGAGAGTGAGCCAAGAGGAAGTCAAGAAATGGGCTGAATCACTGGAAAACCTGATTAGTCATGAA
 TGTGGGCTGGCAGCTTCAAAGCTTCTTGAAGTCTGAATATAGTGAGGAGAATATTGACTTCTGGATCA
 GCTGTGAAGAGTACAAGAAAATCAAATCACCATCTAACTAAGTCCCAAGGCCAAAAAGATCTATAATGA
 ATTCATCTCAGTCCAGGCAACCAAAGAGGTGAACCTGGATTCTTGCAACAGGGAAGACAAAGCCGGAAC
 ATGCTAGAGCCTACAATAACCTGCTTTGATGAGGCCCAGAAGAAGATTTCAACCTGATGGAGAAGGATT
 CCTACCGCCGCTTCTCAAGTCTCGATTCTATCTTGATTTGGTCAACCCGTCCAGCTGTGGGGCAGAAAA
 GCAGAAAGGAGCCAAGAGTTCAGCAGACTGTGCTTCCCTGGTCCCTCAGTGTGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208700 protein sequence
 Red=Cloning site Green=Tags(s)

MCKGLAGLPASCLRSKMDMKHRLGFLQKSDSCEHNSSHKKDKVVICQRVSQEEVKKWAESLENLISHE
 CGLAAFKAFKSEYSEENIDFWISCEEYKKIKSPSKLSPKAKKIYNEFISVQATKEVNLDSCTREETSRN
 MLEPTITCFDEAQKKIFNLMEKDSYRRFLKSRFYLDLVNPSSCGAEKQKGAUSSADCASLVPQCA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

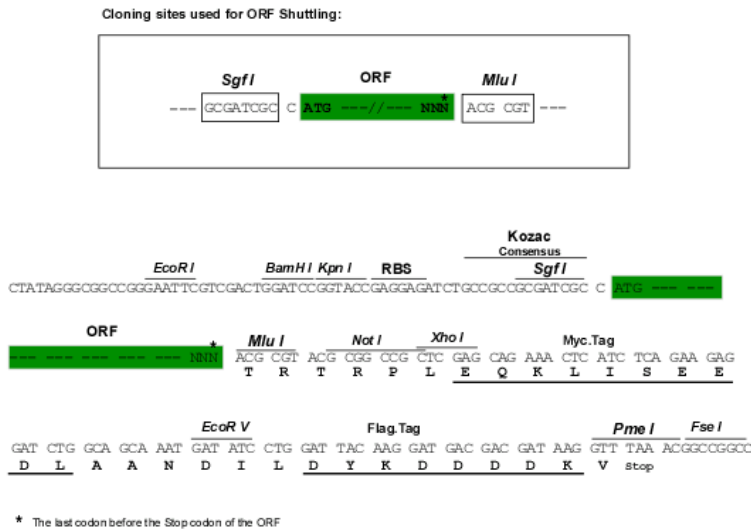


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Chromatograms: https://cdn.origene.com/chromatograms/mk6091_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005613

ORF Size: 615 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_005613.6](#)

RefSeq Size: 3371 bp

RefSeq ORF: 618 bp

Locus ID: 5999

UniProt ID: [P49798](#)

Cytogenetics: 1q23.3

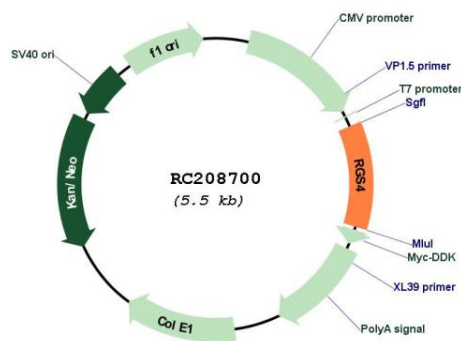
Domains: RGS

Protein Families: Druggable Genome

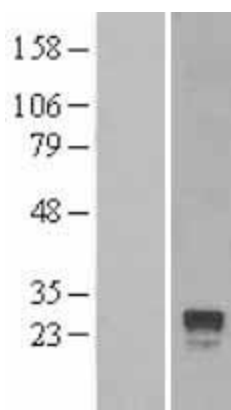
MW: 23.3 kDa

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]

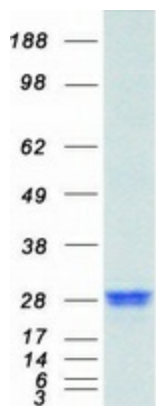
Product images:



Circular map for RC208700



Western blot validation of overexpression lysate (Cat# [LY401720]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208700 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RGS4 protein (Cat# [TP308700]). The protein was produced from HEK293T cells transfected with RGS4 cDNA clone (Cat# RC208700) using MegaTran 2.0 (Cat# [TT210002]).