

Product datasheet for **RC211440**

RGS21 (NM_001039152) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RGS21 (NM_001039152) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RGS21
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC211440 representing NM_001039152
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCAGTGAAATGCTGTTTCTACAGGTCACCAACTGCGGAAACAATGACATGGTCTGAAAATATGGACA
CGCTTTTAGCCAACCAAGCTGGTCTAGATGCTTTTCGAATATTTCTAAAAATCAGAGTTTAGTGAAGAAAA
TGTTGAGTTCTGGCTTGCCTGTGAAGACTTTAAGAAAACGAAAAATGCAGACAAAATTGCTTCCAAAGCC
AAGATGATTTATTCTGAATTCATTGAAGCTGATGCACCTAAAGAGATTAACATTGACTTCGGTACCAGAG
ACCTCATCTCAAAGAATATTGCTGAACCAACACTCAAATGCTTTGATGAGGCTCAGAAATTAATCTATTG
TCTCATGGCCAAGGATTCTTCCCTCGATTTCTGAAGTCAGAGATTTATAAAAAACTGGTAAATAGCCAA
CAGGTTCCAAATCATAAAAAATGGCTCCCTTTTTTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211440 representing NM_001039152
Red=Cloning site Green=Tags(s)

MPVKCCFYRSPTAETMTWSENMDTLLANQAGLDAFRIFLKSEFSEENVEFWLACEDFKKTKNADKIASKA
KMIYSEFIEADAPKEINIDFGTRDLISKNIAEPTLKFDEAQLIYCLMAKDSFPRFLKSEIYKLVNSQ
QVPNHKKWLPFL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8025_g10.zip

Restriction Sites: SgfI-MluI



[View online >](#)

Cloning Scheme:


ACCN: NM_001039152

ORF Size: 456 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_001039152.3](#), [NP_001034241.1](#)

RefSeq Size: 1795 bp

RefSeq ORF: 459 bp

Locus ID: 431704

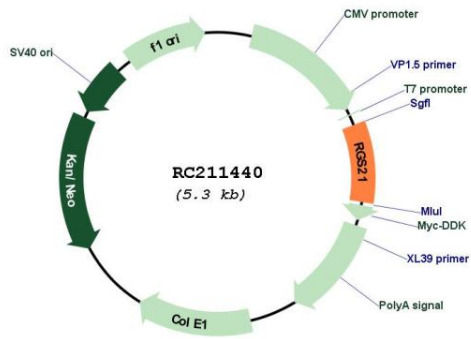
UniProt ID: [Q2M5E4](#)

Cytogenetics: 1q31.2

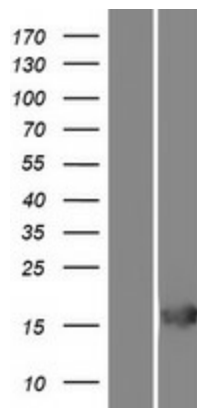
MW: 17.5 kDa

Gene Summary: Regulator of G protein signaling (RGS) proteins are regulatory and structural components of G protein-coupled receptor complexes. RGS proteins are GTPase-activating proteins for Gi (see GNAI1; MIM 139310) and Gq (see GNAQ; MIM 600998) class G-alpha proteins. They accelerate transit through the cycle of GTP binding and hydrolysis and thereby accelerate signaling kinetics and termination.[supplied by OMIM, Nov 2008]

Product images:



Circular map for RC211440



Western blot validation of overexpression lysate (Cat# [LY422023]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211440 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).