

Product datasheet for RC221566

RGS20 (NM_170587) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RGS20 (NM_170587) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RGS20
Synonyms:	g(z)GAP; gz-GAP; RGSZ1; ZGAP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221566 representing NM_170587 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCCAGCTTTCCCAAGATAACCAAGAGTGCCTCCAGAAACATTTCTCCAGGCCGTCTATATGGACAC
AGTTTCTGCCCTGTTCCAGGGCTCAGAGATATAATACAGACATTCACCAAATCACAGAAAATGAAGGAGA
CCTCAGGGCTGTTCTGATATCAAGTCTTCCCGCTGCACAGCTCCAGACTCGCCGCCGCCCGAAG
CTGTTCCGGCTCCTTTAGCCCGCTTCCAGCCTCGCAAGGTTCTTCTCTCACCTTCTCCGGCGACCC
CTCCCGAGGCTCCCGGAGGCGCTGGACTTCTCCCCCTGCTTCCCGCCTGCCGGCCGCCCGGCTCTC
GAGGGGACAGGAGGCTGCCGGCCGCTCTCGCTCTGCTCGGGCGCGCTGGCACTGCCCGCCGA
CCCTCGGGGGTCTGTCGCTGAGGCCCCCATCCGGTAGCCAAGCCAGGGAAGAAGACGCCACCGCTG
GGCAGAGCTCGCCTATGCCCGAGATGGGATCAGAGCGGATGGAGATGCGGAAGCGGCAGATGCCCGCCG
CCAGGACACACAGGCGCCGCCAGGCCAGCCCGGAGCGGGAGTCCGGGTCCAACGCATGCTGCTTC
TGCTGGTCTGCTGTTGTAGTCTGCTGCTCACTGTTAGAAACCAGGAAGATCAGAGGCCACAATAG
CTTCCACGAACCTCAGAGCAGATCTTCCAACCTGGGAAGAAAGCCCTGCTCTACTCTGGAAGAAGTCAA
CGCCTGGGCTCAGTCATTTGACAAATTAATGGTCACTCCAGCAGGAAGGAATGCATTCCGTGAATTCCTC
CGAACAGAATTCAGTGAGGAAAATATGCTCTTCTGGATGGCTGTGAGGAACTGAAAAGGAAGTAAATA
AAAACATTATTGAAGAGAAAGCAAGGATAATCTATGAAGACTACATTTCTATACTTCTCCTAAGGAGGT
GAGCTTAGACTCCCGGTGAGAGAAGTGATCAACAGAAACATGGTGGAGCCATCCCAACACATATTCGAT
GATGCTCAACTTCAGATTTACACCCTGATGCACAGAGACTCATATCCTCGATTCATGAACCTGCTGCTCT
ATAAGGACTTGTTCAGTCTTATCGGAGAAATCTATTGAAGCA

ACGGTACGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221566 representing NM_170587
Red=Cloning site Green=Tags(s)

MPQLSQDNQECLQKHF SRPSIWTF LPLFRAQRYNTDIHQITENEGDLRAVPDIKSFPPAQLPDSPAAPK
 LFGLLSSPLSSLARFFSHLLRRPPPEAPRRRLDFSPLLPALPAARL SRGHEELPGRLSLLLGAALALPGR
 PSGRPLRPPHPVAKPREEDATAGQSSPMPQMGSERMEMRKRQMPAAQDTPGAAPGQPGAGSRGSNACCF
 CWCCCCSCSCLTVRNQEDQRPTIASHEL RADLPTWEESPAP TLEE VNAWAQSFDKLMVTPAGRNAFREFL
 RTEFSEENMLFWMACEELKKEANKNIEEKARI IYEDYISILSPKEVSLDSRVREVINRNMVEPSQHIFD
 DAQLQIYITLMHRDSYPRFMNSAVYKDLLQSLSEKSIEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8056_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_170587

ORF Size: 1164 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_170587.4](#)

RefSeq Size: 2102 bp

RefSeq ORF: 1167 bp

Locus ID: 8601

UniProt ID: [O76081](#)

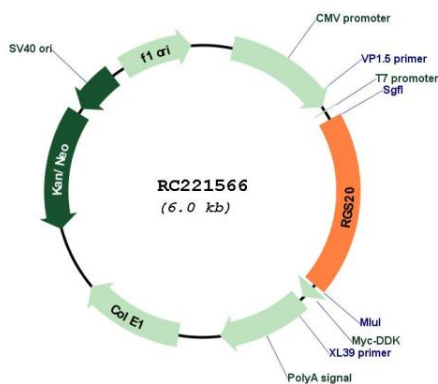
Cytogenetics: 8q11.23

Protein Families: Druggable Genome

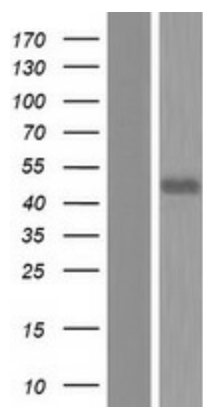
MW: 43.5 kDa

Gene Summary: The protein encoded by this gene belongs to the family of regulator of G protein signaling (RGS) proteins, which are regulatory and structural components of G protein-coupled receptor complexes. RGS proteins inhibit signal transduction by increasing the GTPase activity of G protein alpha subunits, thereby driving them into their inactive GDP-bound forms. This protein selectively binds to G(z)-alpha and G(alpha)-i2 subunits, and regulates their signaling activities. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]

Product images:



Circular map for RC221566



Western blot validation of overexpression lysate (Cat# [LY406909]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221566 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).