

Product datasheet for **RC215410**

RGS10 (NM_002925) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RGS10 (NM_002925) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RGS10
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC215410 representing NM_002925
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAACACATCCACGACAGCGATGGCAGTTCCAGCAGCAGCCACCAGAGCCTCAAGAGCACAGCCAAAT
GGGCGGCATCCCTGGAGAATCTGCTGGAAGACCCAGAAGGCGTAAAAAGATTTAGGGAATTTTTAAAAA
GGAATTCAGTGAAGAAAATGTTTTGTTTTGGCTAGCATGTGAAGATTTAAGAAAATGCAAGATAAGACG
CAGATGCAGGAAAAGCAAAGGAGATCTACATGACCTTCTGTCCAGCAAGGCCTCATCACAGGTCAACG
TGGAGGGCAGTCTCGGCTCAACGAGAAGATCCTGGAAGAACCACCCCTCTGATGTTCCAGAACTCCA
GGACCAGATCTTTAATCTCATGAAGTACGACAGCTACAGCCGCTTCTTAAAGTCTGACTTGTTTTTAAAA
CACAAGCGAACCGAGGAAGGAAGAAGATTTGCCTGATGCTCAAAGTGCAGCTAAAAGAGCTTCCAGAA
TTTATAACACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC215410 representing NM_002925
Red=Cloning site Green=Tags(s)
MEHIHSDGSSSSSHQSLKSTAKWAASLENLLEDPEGVKRFREFLKKEFSEENVLFWLACEDFKKMQDKT
QMQEKAKEIYMTFLSSKASSQVNVVEGQSRLEKILEEPHPLMFQKLQDQIFNLMKYDSYSRFLKSDLFLK
HKRTEEEEEEDLPDAQTAKRASRIYNT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6490_f03.zip

Restriction Sites: SgfI-MluI



[View online >](#)

Cloning Scheme:


ACCN: NM_002925

ORF Size: 501 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_002925.3](#), [NP_002916.1](#)

RefSeq Size: 859 bp

RefSeq ORF: 504 bp

Locus ID: 6001

UniProt ID: [O43665](#)

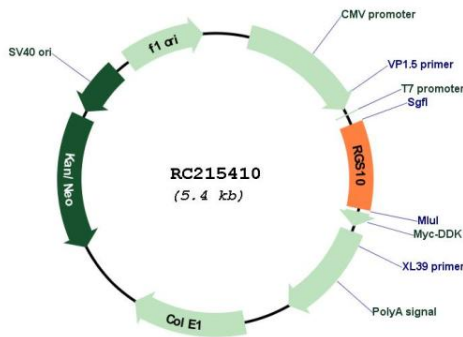
Cytogenetics: 10q26.11

Domains: RGS

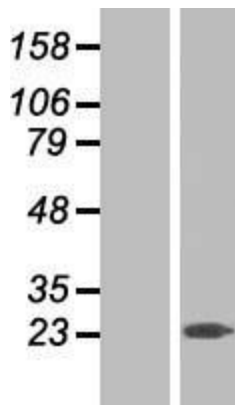
MW: 19.4 kDa

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 10 belongs to this family. All RGS proteins share a conserved 120-amino acid sequence termed the RGS domain. This protein associates specifically with the activated forms of the two related G-protein subunits, G-alpha_{i3} and G-alpha_z but fails to interact with the structurally and functionally distinct G-alpha subunits. Regulator of G protein signaling 10 protein is localized in the nucleus. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

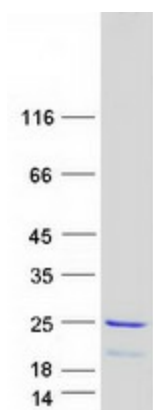
Product images:



Circular map for RC215410



Western blot validation of overexpression lysate (Cat# [LY419006]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215410 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RGS10 protein (Cat# [TP315410]). The protein was produced from HEK293T cells transfected with RGS10 cDNA clone (Cat# RC215410) using MegaTran 2.0 (Cat# [TT210002]).