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Product datasheet for RC203488

RGS10 (NM_001005339) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RGS10 (NM_001005339) 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:

>RC203488 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTCAACCGCGCCGTGAGCCGGCTGAGCAGGAAGCGGCCGCCGTCAGACATCCACGACAGCGATGGCA
GTTCCAGCAGCAGCCACCAGAGCCTCAAGAGCACAGCCAAATGGGCGGCATCCCTGGAGAATCTGCTGGA
AGACCCAGAAGGCGTGAAAAGATTTAGGGAATTTTTAAAAAAGGAATTCAGTGAAGAAAATGTTTTGTTT
TGGCTAGCATGTGAAGATTTTAAGAAAATGCAAGATAAGACGCAGATGCAGGAAAAGGCAAAGGAGATCT
ACATGACCTTTCTGTCCAGCAAGGCCTCATCACAGGTCAACGTGGAGGGGCAGTCTCGGCTCAACGAGAA
GATCCTGGAAGAACCGCACCCTCTGATGTTCCAGAAACTCCAGGACCAGATCTTTAATCTCATGAAGTAC
GACAGCTACAGCCGCTTCTTAAAGTCTGACTTGTTTTTAAAACACAAGCGAACCGAGGAAGAGGAAGAAG
ATTTGCCTGATGCTCAAACTGCAGCTAAAAGAGCTTCCAGAATTTATAACACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203488 protein sequence
Red=Cloning site Green=Tags(s)

MFNRAVSRLSRKRPPSDIHDSDGSSSSSHQSLKSTAKWAASLENLLEDPEGVKRFREFLKKEFSEENVLF
WLACEDFKKMQDKTQMQEKAKEIYMTFLSSKASSQVNVEGQSRLNEKILEEPHPLMFQKLQDQIFNLMKY
DSYSRFLKSDLFLKHKRTEEEEEDLPDAQTAAKRASRIYNT

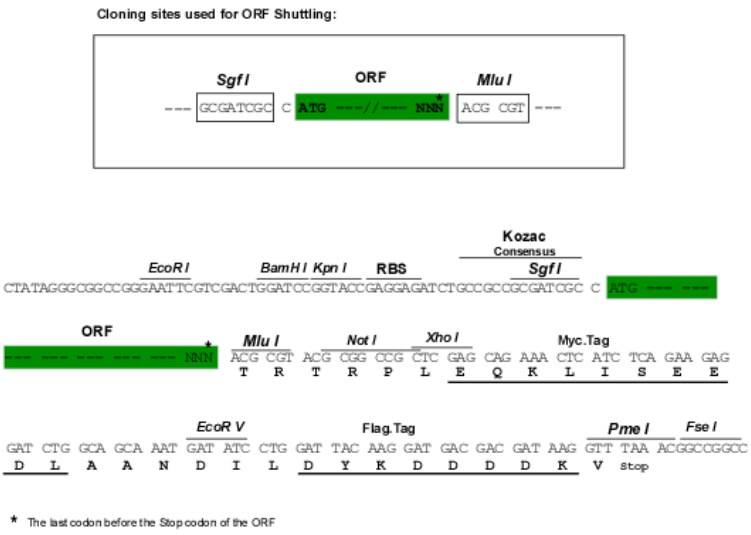
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6423_h11.zip

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_001005339

ORF Size: 543 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

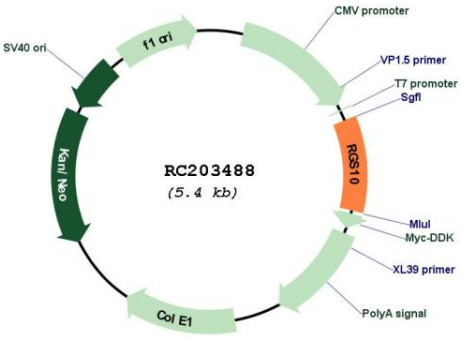
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

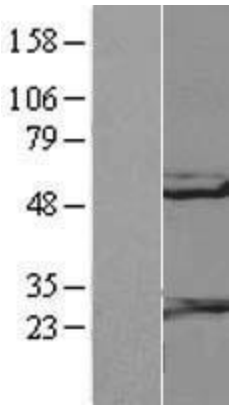
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001005339.2
RefSeq Size:	910 bp
RefSeq ORF:	546 bp
Locus ID:	6001
UniProt ID:	O43665
Cytogenetics:	10q26.11
MW:	21.2 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-alphai3 and G-alphaz 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]

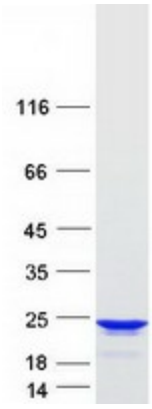
Product images:



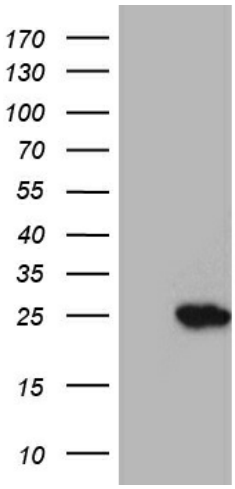
Circular map for RC203488



Western blot validation of overexpression lysate (Cat# [LY423865]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203488 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RGS10 protein (Cat# [TP303488]). The protein was produced from HEK293T cells transfected with RGS10 cDNA clone (Cat# RC203488) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RGS10 (Cat# RC203488, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RGS10(Cat# [TA812310]). Positive lysates [LY423865] (100ug) and [LC423865] (20ug) can be purchased separately from OriGene.