

Product datasheet for **MR202294**

Rgs2 (NM_009061) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rgs2 (NM_009061) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rgs2
Synonyms:	GOS8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202294 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAAAGTGCCATGTTCTGGCTGTCCAGCACGACTGCGTACCCATGGACAAGAGTGCAGGCAACGGCC
CCAAGGTCGAGGAGAAGCGGGAGAAAAATGAAGCGGACACTCTTAAAGGATTGGAAGACCCGTTTGAGCTA
CTTCTTGAGAATTCTCTGCTCTGGGAAGCCAAAACCTGGCAAGAAAAGCAAACAGCAAACCTTTATC
AAGCCTTCTCCTGAGGAAGCGCAGCTCTGGGCAGAAGCATTGATGAACTGCTGGCCAGTAAATATGGGC
TGGCTGCATTAGGGCGTTTTTAAAGTCCGAGTTCTGTGAAGAAAACATTGAATTCTGGTTGGCTTGTA
AGACTTCAAAAAACCAATCACCCAAAAACTGTCTCAAAGCAAGGAAAATCTATACCGACTTCATA
GAGAAGGAAGCTCCCAAAGAGATAAACATAGACTTCAAACGAAATCTCTGATTGCCAAAATATCCAAG
AGGCTACAAGTGCTGCTTACCACAGCTCAGAAGAGGGTGTACAGTTTGTGGAGAACAATTCTTATCC
TCGGTTCTGGAGTCCGAATTCTACCAGGACTTATGTAAAAAGCCACAGATCACCCACGGAGCCCCATGCT
ACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR202294 protein sequence
 Red=Cloning site Green=Tags(s)

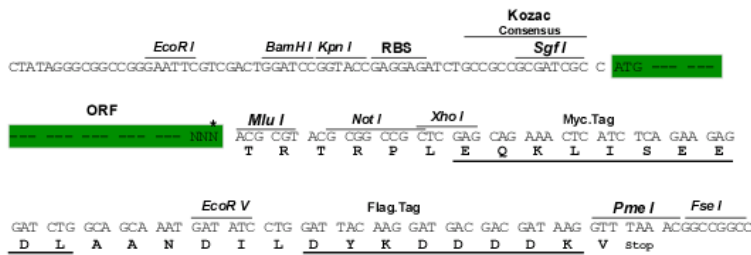
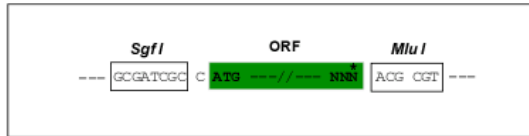
MQSAMFLAVQHDCVPMDKSAGNGPKVEEKREKMKRLLKDWKTRLSYFLQNSSAPGPKPTGKKSQQTFI
 KPSPEEAQLWAEAFDELLASKYGLAAFRFLKSEFCEENIEFWLACEDFKKTKSPQKLSKARKIYTDFI
 EKEAPKEINIDFQTKSLIAQNIQEATSGCFTTAQKRVSLSLMENNSYPRFLESEFYQDLCKKPQITTEPHA
 T

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_009061

ORF Size: 636 bp

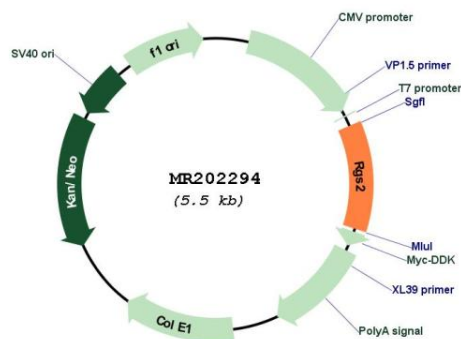
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:	<ol style="list-style-type: none"> 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:	<u>NM_009061.4</u>
RefSeq Size:	3009 bp
RefSeq ORF:	636 bp
Locus ID:	19735
UniProt ID:	<u>O08849</u>
Cytogenetics:	1 62.56 cM
MW:	24.3 kDa
Gene Summary:	Regulates G protein-coupled receptor signaling cascades. Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits, thereby driving them into their inactive GDP-bound form (By similarity). It is involved in the negative regulation of the angiotensin-activated signaling pathway (By similarity). Plays a role in the regulation of blood pressure in response to signaling via G protein-coupled receptors and GNAQ. Plays a role in regulating the constriction and relaxation of vascular smooth muscle (PubMed:14608379). Binds EIF2B5 and blocks its activity, thereby inhibiting the translation of mRNA into protein (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR202294