

Product datasheet for **MG207517**

Rgs7 (BC051133) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rgs7 (BC051133) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rgs7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG207517 representing BC051133
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCTCAGGGAATAATTATGGACAGACCAGCAACGGGTGGCGGACGAATCACCCAACATGCTGGTGT
 ACAGAAAGATGGAAGATGTCATAGCACGTATGCAAGACGAGAAAAACGGAATTCCTATCCGTACCGTCAA
 AAGCTTCCTTTCCAAGATCCCCAGTGTGTCTCCGGGTGACACATTGTTCAATGGTTAATAAAGAACTTA
 ACTATAGAAGATCCAGTGGAGGCTCTCCATTTGGGAACGCTAATGGCTGCCCATGGCTACTTCTTTCCCA
 TCTCAGATCATGTCTCACACTCAAGGATGACGGCACCTTCTACCGGTTTCAAACACCCTATTTTGGCC
 GTCAAATTGTTGGGAGCCAGAAAACACAGACTATGCTGTTTACCTCTGCAAGAGAACAATGCAAAACAAG
 GCAAGGCTAGAGCTAGCAGATTATGAAGCCGAGAGCCTGGCCAGGCTGCAGAGAGCATTGGCCGGAAGT
 GGGAGTTCATTTTATGCAAGCAGAAGCACAAGCTAAAGTGGACAAGAAGAGAGACAAAATTGAAAGGAA
 GATCCTCGATAGTCAAGAGAGAGCATTCTGGGATGTCCACAGGCCTGTGCCTGGATGTGTAATACTACA
 GAAGTGGACATTAAGAAGTCATCCCGGATGAGAAACCCACACAAAACACGAAAGTCTGTCTATGGTTTAC
 AAAATGACATCCGAAGTCACAGTCCCACCCACACACCTACACCAGAAACCAAGCCTCTACAGAAGATGA
 GCTGCACCAACAGATAAAATACTGGCAAATACAGTTAGATAGACATCGGTTAAAAATGTCAAAGTTGCT
 GATAGTCTACTAAGCTATACGGAACAGTATGTAGAATATGACCCGTTTCTTGTGCCGCCTGACCCTTCCA
 ATCCATGGCTCTCAGATGATACGACTTTCTGGGAACCTGAAGCAAGCAAGAACAAGTCAACAGAGGGT
 AAAACGATGGGTTTTGGTATGGATGAGGCATTGAAAGACCCAGTTGGCGGAGAGCAGTTCCTTAAGTTT
 CTAGAATCAGAATTCAGCTCAGAGAACTTAAGGTTCTGTTGGCAGTGGAGGACCTGAAGAGAAGGCCTA
 TCCGAGAGGTCCCCTCGAGAGTGCAGGAAATATGGCAAGAATTTCTGGCTCTGGGGCCCCCAGTGCCAT
 TAACTTGGATTCTAAGAGTTATGACAAGACCACACAGAATGTGAAGGAACCAAGGACGATACACATTTGAA
 GATGCTCAGGAGCATATTTACAAGCTGATGAAGAGCGACTCATACCCCGCTTTATAAGATCTAGTGCCT
 ACCAGGAACCTCTACAGGCAAAGAGAAAGAGATGCCATGAAAGGCTGCTCCACGCCGTACTTAGCCCAAG
 AGCCTTTGTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

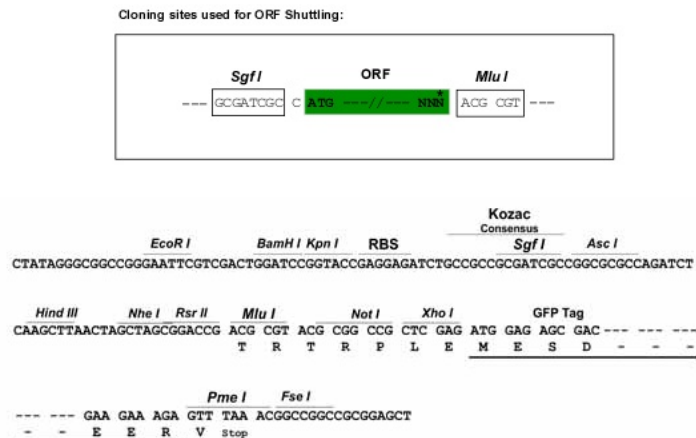
>MG207517 representing BC051133
 Red=Cloning site Green=Tags(s)

MAQGNNYQTSNGVADESPNMLVYRKMEDVIARMQDEKNGIPIRTVKSFSLKIPSVFSGSDIVQWLIKNL
 TIEDPVEALHLGLTMAAHGYFFPISDHVLTLDKDDGTFYRFQTPYFWPSNCWEPENTDYAVYLCKRTMQNK
 ARLELADYEAESLARLQRAFARKWEFIFMQAEQAKVDKKRDKIERKILDSQERAFWDVHRPVPVCVNTT
 EVDIKSSRMNPHKTRKSVYGLQNDIRSHSPHTPTPETKPTEDELHQQIKYWQIQLDRHLKMSKVA
 DSSL SYTEQYVEYDPFLVPPDPSNPWLSDDTTFWELASKEPSQQRVVRWGFMDKALDPVGREQFLKF
 LESEFSSNLRFLAVEDLKRPIREVPSPRVQEIWQEFAPGAPSAINLDSKSYDKTTQNVKEPGRYTFE
 DAQEHYKLMKSDSYPRFIRSSAYQELLQAKRKRCRERLLHVLSPRAFV

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: BC051133

ORF Size: 1410 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [BC051133.1](#)

RefSeq Size: 2462 bp

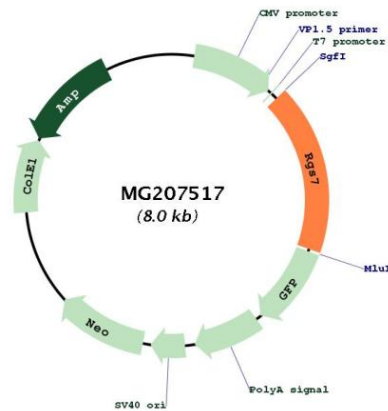
RefSeq ORF: 1412 bp

Locus ID: 24012

Cytogenetics: 1 81.11 cM

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. The RGS7/GNB5 dimer enhances GNAO1 GTPase activity. May play a role in synaptic vesicle exocytosis. Modulates the activity of potassium channels that are activated by GNAO1 in response to muscarinic acetylcholine receptor M2/CHRM2 signaling. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG207517