

Product datasheet for MR228517

Rgs20 (NM_001290372) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rgs20 (NM_001290372) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Rgs20
Synonyms: 2900073E09Rik; Rgsz1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR228517 representing NM_001290372
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCGGATGCGGCAGATGTGCGGCGGAAGTGAGACCCAGGGCCCTGCCCAAGCCAGCAGGGTGGCCGGG
 GCTCCAACGCCTGCTGCTTCTGTTGGTGTCTGCTGCACCTGTTCTTGCCTCACTGTGAGAAACCAAGA
 AGACCAGAGACCCAAAGAGCCTCCCATGAAATCAGAACAGACATTCCAGCATGTGAAGAAAGCCCCACG
 CCTACTCTGGAAGAAGTCTGTGCCTGGGCCAGTCTTTTGATAACCTGATGGTCACTCCAGCCGGAAGAA
 ATGCATCCGCGGAATTTCTCGAACAGAATTCAGTGAAGAAAACATGCTCTTCTGGATGGCCTGTGAAGA
 ACTGAAAAGGGAAGCTAATAAAAGCACTATTGAGGAGAAAGCAAGGATAATCTATGAGGACTATATTTCT
 ATTCTCTCTCCTAAAGAGGTCAGCTTGGACTCCCGAGTACGAGAGGTTATCAACAGAAACATGGTGGATC
 CATCCCAGCACATATTCGATGACGCTCAACTGCAGATCTACACTTAATGCACAGAGACTCCTATCCCCG
 CTTTCATGAACCTCCACAGTCTATAAGGATTTGCTTACGTCCTTAGCTGAGAAAACAGTTGAAGCA

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR228517 representing NM_001290372
 Red=Cloning site Green=Tags(s)

MRMRQMCGGSETQGPAPSQQGGRGSNACCFWCCCTCSCLTVRNQEDQRPQRASHEIRTDIPACEESPT
 PTLEEVCWAQSFNDLMVTPAGRNFREFLRTEFSEENMLFWMACEELKREANKSTIEEKARIIYEDYIS
 ILSPKEVSLDSRVREVINRNMVDPSQHIFDDAQLQIYTLMHRDSYPRFMNSTVYKDILLTSLAEKTVEA

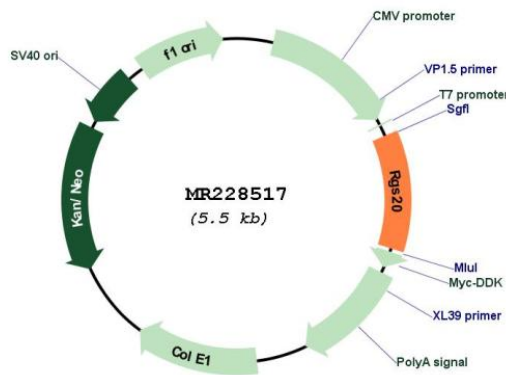
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001290372

ORF Size: 624 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_001290372.1](#), [NP_001277301.1](#)

RefSeq Size: 1708 bp

RefSeq ORF: 627 bp

Locus ID: 58175

UniProt ID: [Q9QZB1](#)

Cytogenetics: 1 A1

MW: 24.3 kDa

Gene Summary: Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits thereby driving them into their inactive GDP-bound form. Binds selectively to G(z)-alpha and G(alpha)-i2 subunits, accelerates their GTPase activity and regulates their signaling activities. The G(z)-alpha activity is inhibited by the phosphorylation and palmitoylation of the G-protein. Negatively regulates mu-opioid receptor-mediated activation of the G-proteins. [UniProtKB/Swiss-Prot Function]