

## Product datasheet for MR219775

### Rgs20 (NM\_001177795) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rgs20 (NM_001177795) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rgs20
Synonyms:	2900073E09Rik; Rgsz1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR219775 representing NM_001177795 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCAGCCTTTCCAAGAAAACCAAGGGTACCTAGAAGAGCATCTTACCAGGCAGGCTGCACAGGCAC  
AGTTGCTGCCCTCTTCAGAGCAGAGAAAGATTATAATCCAGTATTGACCAAGACAGAAAGATAAAGA  
GGGATCCAAGCCGTGACTGGTGTCAAGCTCCAGACTCCACGGGTCGACTCATTTGCCACCTTTCTA  
GCCTGCTCTCCAGCTGTTCTTGTGCTTCTGCGGCGACCCCTCCCGTGGCTTGCCTGGCGCAGGGACT  
TTCCCTCTCAGCCAAGCTCCTGGCTACTGCCTGGCTCTCTCCAGAGCCCACCGCTCCTGTTCTACT  
TGTGGCCTCAATGGCACTGCCAGGACGACTCCGAGGGGTCGTCTACTGAAGCTGGCAAGTCCGAATTCCG  
GAGCCCAGAGGAGAGGACGCCTGTACTGAAAAGAGTTCACCCGAGTCCCCTGAGGGATCTGAGCGGACGG  
AAATGCGGATGCGGCAGATGTGCGGCGGAAGTGAGACCCAGGGCCCTGCCCAAGCCAGCAGGGTGGCCG  
GGGCTCCAACGCCTGCTGCTTCTGTTGGTGTGCTGCTGCACCTGTTCTTGCCTCACTGTGAGAAACCA  
GAAGACCAGAGACCCAAAGAGCCTCCCATGAAATCAGAACAGACATTCAGCATGTGAAGAAAGCCCCA  
CGCCTACTCTGGAAGAAGTCTGTGCTGGGCCAGTCTTTTGATAACCTGATGGTCACTCCAGCCGGAAG  
AAATGCATTCCGGAATTTCTTGAACAGAATTCAGTGAAGAAAACATGCTCTTCTGGATGGCCTGTGAA  
GAAGTAAAAGGGAAGCTAATAAAGCACTATTGAGGAGAAAGCAAGGATAATCTATGAGGACTATATT  
CTATTCTCTCCTAAAGAGGTACGCTTGGACTCCCGAGTACGAGAGGTTATCAACAGAAACATGGTGGA  
TCCATCCAGCACATATTCGATGACGCTCAACTGCAGATCTACACTCTAATGCACAGAGACTCCTATCCC  
CGCTTCATGAACTCCACAGTCTATAAGGATTTGCTTACGTCCTTAGCTGAGAAAACAGTTGAAGCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >MR219775 representing NM\_001177795  
Red=Cloning site Green=Tags(s)

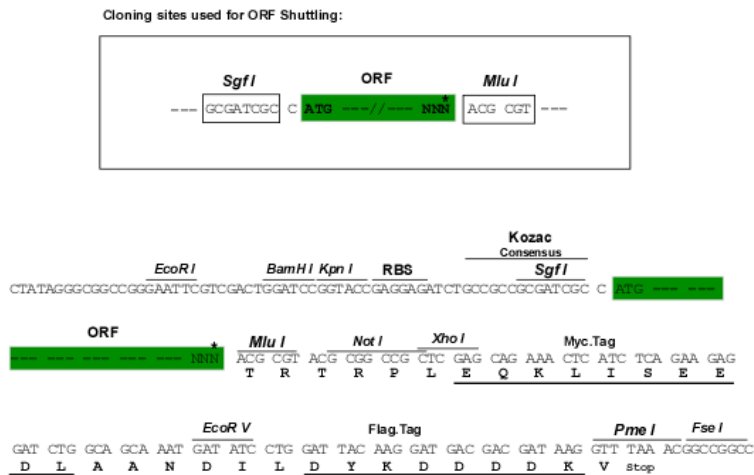
MPSLSQENQGYLEEHLTRQAAQAQLLPLFRAEKDYNPSIDQDTEDEKGSQAVTGVKLPDSTGSTHFATFL  
 ACSPAFLVSSAATPSRGLPGRDFPSQPSSWPTAWLSPEPHRLFLVASMALPGRPRGRLLKLASPNS  
 EPRGEDACTEKSSPESEGSERTEMRMQMCGGSETQGPAPSQQGGRGSNACCFWCCCCCTCSCLTVRNQ  
 EDQRPQRASHEIRTDIPACEESPTPTLEEVCAWAQSFNLMVTPAGRNAFREFLRTEFSEENMLFWMACE  
 ELKREANKSTIEEKARIIEYDYISILSPKEVSLDSRVREVINRNMVDPQSQHFDDAQLIYTLMHRDSYP  
 RFMNSTVYKDLLTSLAEKTVEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9077\\_b01.zip](https://cdn.origene.com/chromatograms/mm9077_b01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001177795

**ORF Size:** 1116 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\_001177795.1, NP\_001171266.1

**RefSeq Size:** 2125 bp

**RefSeq ORF:** 1119 bp

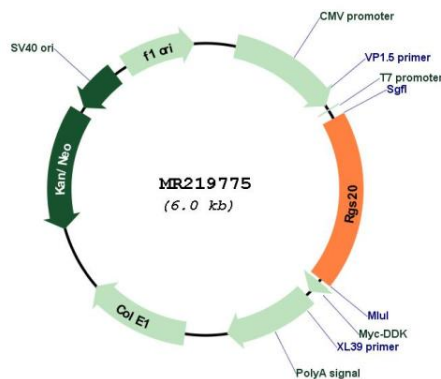
**Locus ID:** 58175

**Cytogenetics:** 1 A1

**MW:** 41.7 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]

## Product images:



Circular map for MR219775