



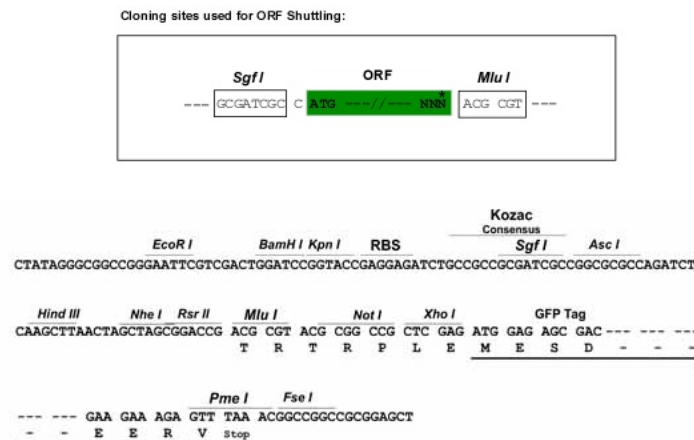
**Protein Sequence:** >RG218663 representing NM\_002043  
Red=Cloning site Green=Tags(s)

MPYFTRLILFLFCLMVLVESRKPKRKRWTGQVEMPKPSHLYKKNLDVTKIRKGGKPKQLLRVDEHDFSMRP  
 AFGGPAIPVGVDVQVESLDSISEVDMDFMTLYLRHYWKDERLAFSSASNKSMTFDGRLVKKIWVPDVFF  
 VHSKRFSFTHDTTNDNIMLRVFPDGHVLYSMRITVTAMCNMDFSHFPLDSQTCSELESYAYTDEDLMLYW  
 KNGDESLKTDEKISLSQFLIQKFHTTSRLAFYSSTGWYNRLYINFTLRRHIFFFLLQTYFPATLMVMSW  
 VSFWIDRRRAVPARVSLGITTVLTMTTIIITGVNASMPRVSYVKAVDIYLWVSFVFLSVLEYAAVNYLTT  
 VQERKERKLRKFPKCMGMLHSKTMMLDGSYSEANSLAGYPRSHILTEERQDKIVVHLGLSGEANAA  
 RKKGLLKGQTGFRIFQNTHAIDKYSRLIFPASYIFFNLIYWSVFS

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002043

**ORF Size:** 1395 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\\_002043.5](#)

**RefSeq Size:** 1631 bp

**RefSeq ORF:** 1398 bp

**Locus ID:** 2570

**UniProt ID:** [P28476](#)

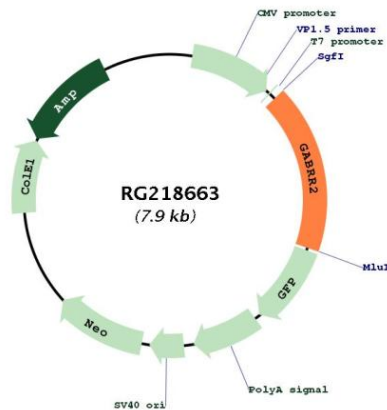
**Cytogenetics:** 6q15

**Protein Families:** Druggable Genome, Ion Channels: Cys-loop Receptors, Transmembrane

**Protein Pathways:** Neuroactive ligand-receptor interaction

**Gene Summary:** Gamma-aminobutyric acid (GABA) is the major inhibitory neurotransmitter in the mammalian brain where it acts at GABA receptors, which are ligand-gated chloride channels. The protein encoded by this gene is a member of the rho subunit family and is a component of the GABA type A receptor complex. This gene exists on chromosome 6q next to the gene encoding the rho 1 subunit of the GABA type A receptor, in a region thought to be associated with susceptibility for psychiatric disorders and epilepsy. Polymorphisms in this gene may also be associated with alcohol dependence, and general cognitive ability. [provided by RefSeq, Apr 2016]

**Product images:**



Circular map for RG218663