

Product datasheet for **RG210173**

GABA A Receptor gamma 2 (GABRG2) (NM_198903) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GABA A Receptor gamma 2 (GABRG2) (NM_198903) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GABA A Receptor gamma 2
Synonyms:	CAE2; DEE74; ECA2; EIEE74; FEB8; GEFSP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG210173 representing NM_198903
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGTTCGCCAAATATATGGAGCACAGGAAGCTCAGTCTACTCGACTCCTGTATTTTCACAGAAAATGA
 CGGTGTGGATTCTGCTCCTGCTGTCGCTCTACCCTGGCTTCACTAGCCAGAAATCTGATGATGACTATGA
 AGATTATGCTTCTAACAAAACATGGGTCTTGACTCCAAAAGTTCCTGAGGGTGATGTCACGTGCATCTTA
 AACAACTGCTGGAAGGATATGACAATAAACTTCGGCCTGATATAGGAGTGAAGCCAACGTTAATTCACA
 CAGACATGTATGTGAATAGCATTGGTCCAGTGAACGCTATCAATATGGAATACACTATTGATATATTTTT
 TGCGCAAACGTGGTATGACAGACGTTTGAATTTAACAGCACCATTAAAGTCTCCGATTGAACAGCAAC
 ATGGTGGGAAAACTGGATTCCAGACACTTTCTCAGAAATCCAAAAAGCTGATGCACACTGGATCA
 CCACCCCAACAGGATGCTGAGAATTTGGAATGATGGTCGAGTGTCTACACCCTAAGGTTGACAATTGA
 TGCTGAGTGCCAATTACAATTGCACAACTTCCAATGGATGAACACTCCTGCCCTTGGAGTTCTCCAGT
 TATGGCTATCCACGTGAAGAAATGTTTATCAATGGAAGCGAAGTTCTGTTGAAGTGGGCGACACAAGAT
 CCTGGAGGCTTTATCAATTCTCATTGTTGGTCTAAGAAATACCACCGAAGTAGTGAAGCAACTCCGG
 AGATTATGTGGTCATGTCTGTCTACTTTGATCTGAGCAGAAGAATGGGATACTTTACCATCCAGACCTAT
 ATCCCCTGCACACTCATTGTCTGCTCTACCTGGGTGTCTTTCTGGATCAATAAGGATGCTGTTCCAGCCA
 GAACATCTTTAGGTATCACCCTGTCTGACAATGACCACCCTCAGCACCATTGCCCGGAAATCGCTCCC
 CAAGGTCTCTATGTACAGCGATGGATCTCTTTGTATCTGTTTGTTCATCTTTGTCTTCTGCTCTG
 GTGGAGTATGGCACCTTGCAATATTTGTACAGCAACCGAAACCAAGCAAGGACAAAGATAAAAAGAAGA
 AAAACCTGCCCTACCATTGATATCCGCCCAAGATCAGCAACCATTCAAATGAATAATGCTACACCT
 TCAAGAGAGAGATGAAGAGTACGGCTATGAGTGTCTGGACGGCAAGGACTGTGCCAGTTTTTCTGCTGT
 TTTGAAGATTGTGAACAGGAGCTTGGAGACATGGGAGGATACATATCCGCATTGCCAAAATGGACTCCT
 ATGCTCGGATCTTCTCCCACTGCCTTCTGCCTGTTAATCTGGTCTATTGGGTCTCTACCTCTACCT
 G

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG210173 representing NM_198903
 Red=Cloning site Green=Tags(s)

MSSPNIWSTGSSVYSTPVFSQKMTVWILLLLSLYPGFSTQKSDDDYEDYASNKTWVWLPKVPEDVTVIL
 NNLLLEGYDNKLRPDIGVKPTLIHTDMYVNSIGPVNAINMEYIDIFFAQTWYDRRLKFNSTIKVLRRLNSN
 MVGKIWIWPDFFRNSKKADAHWITTPNMLRIWNDGRVLYTLRLTIDAECQLQLHNFPMDEHSCLPFFSS
 YGYPREEIVYQWKRSSVEVDTRSWRLYQFSFVGLRNTTEVVKTTSGDYVVMVSYFDLRRMGYFTIQTY
 IPCTLIIVVLSWVSFWINKDAVPARTSLGITTVLMTTLSTIARKSLPKVSYVTAMDLFVSVCFIFVFSAL
 VEYGTLYHYFVSNRKPSKDKKKKNPAPTIDIRPRSATIQMNNATHLQERDEEYGYECLDGKDCASFFCC
 FEDCRTGAWRHGRIHIRIAKMDSYARIFFPATFCLFNLVYVWSYLYL

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_198903

ORF Size: 1401 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](#)

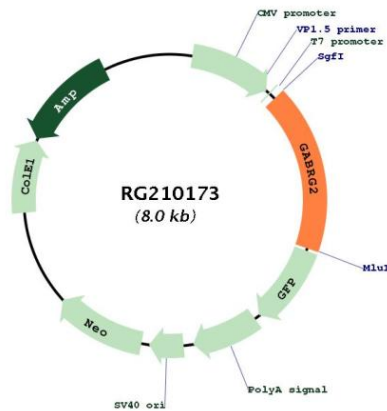
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:**
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_198903.1, NP_944493.1](#)
RefSeq Size: 2308 bp
RefSeq ORF: 1548 bp
Locus ID: 2566
UniProt ID: [P18507](#)
Cytogenetics: 5q34
Protein Families: Druggable Genome, Ion Channels: Cys-loop Receptors, Transmembrane
Protein Pathways: Neuroactive ligand-receptor interaction
Gene Summary: This gene encodes a gamma-aminobutyric acid (GABA) receptor. GABA is the major inhibitory neurotransmitter in the mammalian brain, where it acts at GABA-A receptors, which are ligand-gated chloride channels. GABA-A receptors are pentameric, consisting of proteins from several subunit classes: alpha, beta, gamma, delta and rho. Mutations in this gene have been associated with epilepsy and febrile seizures. Multiple transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG210173