

Product datasheet for **MG225550**

Gabrg2 (NM_177408) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gabrg2 (NM_177408) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gabrg2
Synonyms:	GABAA-R; Gabrg-2; gamma2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG225550 representing NM_177408
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACGCTGTGGATTCTGCTCCTGCTATCGCTCTACCCAGGCTTCACAAGCCAAAAGTCAGATGATGACT
 ATGAAGATTACGCTTCTAATAAAACATGGGTGTTGACTCCAAAAGTTCAGAGGGTGATGCACTGTCAT
 CTTAAACAACCTGCTGGAAGGTATGACAACAACCTCGACCTGACATCGGAGTAAACCAACATTAATT
 CATAAGATATGTATGTGAACAGCATTGGTCCAGTGAATGCTATCAATATGGAATATAACAATTGATATT
 TTTTTGCCAAACCTGGTATGACAGACGTTTGAATTTAACAGTACCATTAAGTTCTCCGGTTGAATAG
 CAATATGGTGGGAAAATCTGGATTCCAGACACTTTCTCAGGAAGTCCAAAAGGCTGATGCTCACTGG
 ATCACCCTCCCAACAGGATGCTGAGAATTTGGAATGATGGTTCGATTCTCTACACCTTAAGGCTAACAA
 TTGATGCTGAGTCCAGTTGCAATTACACAACCTCCCAATGGATGAACACTCCTGCCCTGGAGTTCTC
 CAGTTATGGATATCCTCGTGAAGAAATGTTTATCAATGGAAGCGCAGTTCTGTTGAAGTGGGTGACACA
 AGATCATGGAGGCTGATCAATTTTCCTTTGTTGGATTGAGGAATACAACCTGAAGTAGTGAAGACAACCT
 CTGGTGACTATGTGGTGTGCTGTGTACTTCGATCTGAGCAGAAGAATGGGCTACTTCACCATCCAGAC
 TTACATCCCTGCACACTCATCGTGGTCTGCTGGGTGTCCTTCTGGATCAATAAGGATGCTGTTCTCT
 GCCAGAACATCTTAGGAATCACTACTGCTGACCATGACAACCTTAAGCACCATAGCCAGAAAATCTC
 TGCCCAAGGTCTCCTATGTCACAGCAATGGATCTCTTTGTATCTGTTTGCCTCATCTTTGTGTTTCTGC
 TTTGGTGGAGTATGGCACCTGCATTATTTGTGAGCAACCGGAAGCAAGGATAAAGACAAAAG
 AAGAAAACCCCTGCCCTACCATTGATATTCGTCAGCAACCGGAAGCAAGGATAAAGACAAAAG
 ACCTTCAAGAGAGGGATGAAGAATATGGCTATGAGTGTGTTGGATGGCAAGGACTGTGCCAGTTTCTCTG
 CTGTTTTGAAGATTGCCGAACAGGAGCCTGGAGACATGGGAGGATACATATTCGATTGCCAAAATGGAC
 TCCTATGCTCGGATCTTCTCCCTACCGCCTTTGCTGTTCAATCTGTTTACTGGGTCTCCTATCTTT
 ATCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG225550 representing NM_177408
 Red=Cloning site Green=Tags(s)

MTLWILLLLSLYPGFTSQKSDDDYEDYASNKTWVLPKVPEGDVTVILNNLLEGYDNKLRPDIGVKPTLI
 HTDMYVNSIGPVNAINMEYIDIFFAQWYDRRLKFNSTIKVLRNLNSNMVGKIWIPTFFRNSKKADAHW
 ITTPNRMLRIWNGRVL YTLRLTIDAECQLQLHNFPMDEHSCPLEFSSYGYPREEIVYQWKRSSVEVGD
 RSWRLYQFSFVGLRNTTEVVKTTSGDYVMSVYFDLSRRMGYFTIQTYIPCTLIIVLSWVSFWINKDAVP
 ARTSLGITTVLMTTLSTIARKSLPKVSYVTAMDLFVSVCFIFVFSALVEYGTLLHYFVSNRKP SKDKDKK
 KKNPAPTIDIRPRSATIQMNNATHLQERDEEYGYECLDGKDCASFFCCFEDCRTGAWRHGRHRIHRIAKMD
 SYARIFFPTAFCLFNLYVWVSYLYL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_177408

ORF Size: 1335 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_177408.5](#)

RefSeq Size: 3511 bp

RefSeq ORF: 1401 bp

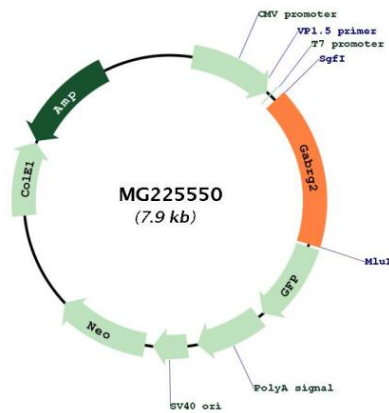
Locus ID: 14406

UniProt ID: [P22723](#)

Cytogenetics: 11 24.8 cM

Gene Summary:

This gene encodes a gamma-aminobutyric acid (GABA)-A receptor subunit, which is a member of the ligand-gated ion channel family. GABA is the major inhibitory neurotransmitter in the adult central nervous system, and conversely exhibits an excitatory function during development. GABA-A receptors are pentameric, consisting of proteins from several subunit classes: alpha, beta, gamma, delta and rho. This gene encodes one of three gamma subunits in mammals, which contain the binding site for benzodiazepine drugs. Several mutations in this gene are associated with epileptic seizures, and genetic knockdown is associated with anxiety behavior. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2013]

Product images:


Circular map for MG225550