

## Product datasheet for **MR225550**

### **Gabrg2 (NM\_177408) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gabrg2 (NM_177408) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gabrg2
Synonyms:	GABAA-R; Gabrg-2; gamma2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR225550 representing NM\_177408  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAGTTCGCCAAATACATGGAGCATTGGAAGCTCAGTCTACTCTCTGTATTTTCACAGAAAATGACGC  
 TGTGGATTCTGCTCTGCTATCGCTCTACCCAGGCTTCAACAAGCCAAAAGTCAGATGATGACTATGAAGA  
 TTACGCTTCTAATAAAACATGGGTGTTGACTCCAAAAGTTCCAGAGGGTATGTCCTGTCATCTTAAAC  
 AACCTGCTGGAAGGGTATGACAACAACTTCGACCTGACATCGGAGTGAAACCAACATTAATTCATACAG  
 ATATGTATGTGAACAGCATTGGTCCAGTGAATGCATCAATATGGAATATAACAATTGATATTTTTTTTGC  
 CCAAACCTGGTATGACAGACGTTTGAATTTAACAGTACCATAAAGTTCTCCGTTGAATAGCAATATG  
 GTGGGGAAAATCTGGATTCCAGACACTTCTTCAGGAAGTCCAAAAGGCTGATGCTCACTGGATCACCA  
 CTCCTAACAGGATGCTGAGAATTTGGAATGATGGTCGAGTCTCTACACCTTAAGGCTAACAAATGATGC  
 TGAGTGCCAGTTGCAATTACACAACCTCCCAATGGATGAACACTCTGCCCTGGAGTTCTCCAGTTAT  
 GGATATCCTCGTGAAGAAATGTTTATCAATGGAAGCGCAGTTCTGTTGAAGTGGGTGACACAAGATCAT  
 GGAGGCTGTATCAATTTTCTTTGTTGGATTGAGGAATACTGAAGTGTGAAGACAACCTTCTGGTGA  
 CTATGTGGTGTCTGTGTACTTCGATCTGAGCAGAAGAATGGGCTACTTCACCATCCAGACTTACATT  
 CCCTGCACACTCATCGTGGTCTGTCTGGGTGTCCTTCTGGATCAATAAGGATGCTGTTCTGCCAGAA  
 CATCTTTAGGAATCACTACTGTCTGACCATGACAACCTTAAGCACCATAGCCAGAAAATCTCTGCCAA  
 GGTCTCTATGTCACAGCAATGGATCTCTTTGTATCTGTTTGCTCATCTTTGTGTTTCTGCTTTGGTG  
 GAGTATGGCACCTGCATTATTTTGTGCAACCGGAAGCAAGCAAGGATAAAGACAAAAGAAGAAAA  
 ACCCTGCCCTACCATTGATATTCGTCAGATCAGCAACCAATCAATGAACAATGCCACACACCTTCA  
 AGAGAGGGATGAAGAATATGGCTATGAGTGTGTTGGATGGCAAGGACTGTGCCAGTTTCTTCTGCTGTTT  
 GAAGATTGCCGAACAGGAGCCTGGAGACATGGGAGGATACATATTCGATTGCCAAAATGGACTCTATG  
 CTCGGATCTTCTCCCTACCGCCTTTGCTGTTCAATCTGTTACTGGGTCTCTATCTTTATCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR225550 representing NM\_177408  
 Red=Cloning site Green=Tags(s)

MSSPNTWSIGSSVYSPVFSQKMTLWLLLLSLYPGFTSQKSDDDYEDYASNKTWVLPKVPEGDVTVILN  
 NLLLEGYDNKLRPDIGVKPTLIHTDMYVNSIGPVNAINMEYTIIDIFFAQTWYDRRLKFNSTIKVLRNLSNM  
 VGKIWIPTDFFRNSKKADAHWITTPNRMLRIWINDGRVLYTLRLTIDAECQLQLHNFPMDEHSCPLEFSSY  
 GYPREEIVYQWKRSSVEVDTRSWRLYQFSFVGLRNTTEVVKTTSGDYVVMVSYFDLSRRMGYFTIQTYI  
 PCTLIIVLWVSWFWINKDAVPARTSLGITTVLTMTLSTIARKSLPKVSYVTAMDLFVSVCFIFVFSALV  
 EYGLHYFVSNRKPSKDKDKKKKNPAPTIDIRPRSATIQMNNATHLQERDEEYGYECLDGKDCASFFCCF  
 EDCRTGAWRHGRIHIRIAKMDSYARIFFPTAFCLFNLVYVWSYLYL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9030\\_f11.zip](https://cdn.origene.com/chromatograms/mm9030_f11.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_177408

**ORF Size:** 1398 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\\_177408.7](#)

**RefSeq Size:** 3511 bp

**RefSeq ORF:** 1401 bp

**Locus ID:** 14406

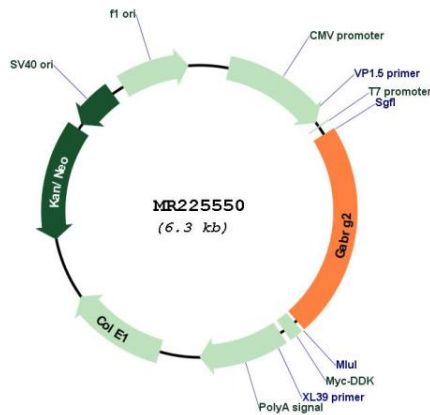
**UniProt ID:** [P22723](#)

**Cytogenetics:** 11 24.8 cM

**MW:** 54.5 kDa

**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 MR225550