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# Product datasheet for MC215938

## Gabrg2 (NM_177408) Mouse Untagged Clone

### Product data:

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



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**Fully Sequenced ORF:**

>MC215938 representing NM_177408
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGTTCGCCAAATACATGGAGCATTGGAAGCTCAGTCTACTCTCCTGTATTTTCACAGAAAATGACGC
TGTGGATTCTGCTCCTGCTATCGCTCTACCCAGGCTTCACAAGCCAAAAGTCAGATGATGACTATGAAGA
TTACGCTTCTAATAAAACATGGGTGTTGACTCCAAAAGTTCCAGAGGGTGATGTCACTGTCATCTTAAAC
AACCTGCTGGAAGGGTATGACAACAAACTTCGACCTGACATCGGAGTGAAACCAACATTAATTCATACAG
ATATGTATGTGAACAGCATTGGTCCAGTGAATGCTATCAATATGGAATATACAATTGATATTTTTTTTGC
CCAAACCTGGTATGACAGACGTTTGAAATTTAACAGTACCATTAAAGTTCTCCGGTTGAATAGCAATATG
GTGGGGAAAATCTGGATTCCAGACACTTTCTTCAGGAACTCCAAAAAGGCTGATGCTCACTGGATCACCA
CTCCCAACAGGATGCTGAGAATTTGGAATGATGGTCGAGTTCTCTACACCTTAAGGCTAACAATTGATGC
TGAGTGCCAGTTGCAATTACACAACTTCCCAATGGATGAACACTCCTGCCCCCTGGAGTTCTCCAGTTAT
GGATATCCTCGTGAAGAAATTGTTTATCAATGGAAGCGCAGTTCTGTTGAAGTGGGTGACACAAGATCAT
GGAGGCTGTATCAATTTTCCTTTGTTGGATTGAGGAATACAACTGAAGTAGTGAAGACAACTTCTGGTGA
CTATGTGGTGATGTCTGTGTACTTCGATCTGAGCAGAAGAATGGGCTACTTCACCATCCAGACTTACATT
CCCTGCACACTCATCGTGGTCCTGTCCTGGGTGTCCTTCTGGATCAATAAGGATGCTGTTCCTGCCAGAA
CATCTTTAGGAATCACTACTGTCCTGACCATGACAACTTTAAGCACCATAGCCAGAAAATCTCTGCCCAA
GGTCTCCTATGTCACAGCAATGGATCTCTTTGTATCTGTTTGCTTCATCTTTGTGTTTTCTGCTTTGGTG
GAGTATGGCACCCTGCATTATTTTGTCAGCAACCGGAAGCCAAGCAAGGATAAAGACAAAAAGAAGAAAA
ACCCTGCCCCTACCATTGATATTCGTCCCAGATCAGCAACCATTCAAATGAACAATGCCACACACCTTCA
AGAGAGGGATGAAGAATATGGCTATGAGTGTTTGGATGGCAAGGACTGTGCCAGTTTCTTCTGCTGTTTT
GAAGATTGCCGAACAGGAGCCTGGAGACATGGGAGGATACATATTCGCATTGCCAAAATGGACTCCTATG
CTCGGATCTTCTTCCCTACCGCCTTTTGCTTGTTCAATCTTGTTTACTGGGTCTCCTATCTTTATCTGTA
A

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM_177408

**Insert Size:** 1401 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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.

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| **RefSeq:** | NM_177408.6, NP_803127.3 |
| **RefSeq Size:** | 3911 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]<br>Transcript Variant: This variant (2) lacks an in-frame exon in the 3' coding region, compared to variant 1. The encoded isoform (2, also known as gamma 2S) is shorter, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript from the same strain was available for the full length of the gene. The extent of this transcript is supported by transcript alignments and orthologous data. |