

## Product datasheet for **MC215935**

### **Gabra2 (NM\_008066) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gabra2 (NM_008066) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gabra2
Synonyms:	C630048P16Rik; Gabra-2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC215935 representing NM\_008066  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAAGACAAAATTGAGCACATGCAATGTATGGTCTCTGCTGCTTGTCTTCTGGTGTGGGACCCAGTCA  
 GGTTGGTCTGGCTAACATCCAAGAAGATGAGGCTAAAAATAACATCACCATCTTTACAAGAATTCTAGA  
 CAGACTTCTGGATGGTTATGATAATCGGCTTAGACCAGGACTGGGAGACAGTATTACTGAAGTCTTCACT  
 AACATTTACGTGACCAGTTTTGGCCCTGTCTCAGATACAGATATGGAGTATACAATAGATGTTTTCTTTC  
 GGCAAAAATGGAAAGATGAGCGTTTAAATTTAAAGGTCTATGAATATCCTTCGACTTAACAATTTAAT  
 GGCCAGCAAAAATCTGGACTCCTGATACCTTCTTTCACAATGGGAAAAAGTCAGTGGCCATAACATGACA  
 ATGCCAAACAAGCTGCTTCGAATCCAGGATGATGGAACATTGCTATATACCATGAGGCTTACAGTCCAAG  
 CCGAATGTCCCATGCACCTGGAGGATTTCCCGATGGATGCTCATTATGCCCACTGAAATTTGGAAGCTA  
 CGTTACACAACCTCAGAAGTACATATATTTGGACTTACAATGCTTCTGACTCCGTTCCAGTTGCTCCC  
 GATGGCTCCAGGTTAAATCAGTATGATTTGCTGGCCAGTCAATTTGGAAAGGAAACAATTAATCCAGTA  
 CAGGTGAATATACTGTAATGACAGCTCATTTCCTTGAAGAAAAATTGGGTATTTGTGATTAGAGC  
 CTATCTGCCTTGATCATGACTGTCATTCTCTCCAAGTGTCATTCTGGCTGAACAGAGAATCGGTGCCA  
 GCAAGAACTGTGTTGGAGTAACAACCTGTTCTAACAATGACAACCTTGAGCATCAGTCTCGAAATTTCC  
 TCCCGAAAGTGGCTTATGCCACTGCCATGGACTGGTTTATAGCTGTTTGTATGCGTTTGTGTTCTCTGC  
 CCTAATTGAATTTGCAACCGTGAATTACTTCACAAAAAGAGGATGGGCTTGGGACGGGAAGAGTGTAGTC  
 AATGACAAGAAAAAGAGAAAGGCTCCGTCATGATACAGAACAACGCCTATGCGGTAGCTGTTGCCAAT  
 ATGCCCCGAATCTTCCAAAGATCCTGTCTCTACCATTTCCAAAAGTGAACGACGCCAGCCAGAACCGAA  
 CAAGAAGCCAGAGAACAAGCCAGCTGAAGCCAAGAAAAACCTTCAACAGTGTGACGCAAAAATCGACAGGATG  
 TCTAGAATAGTGTCCCGATTCTGTTTGGTACTTTAATTTAGTTTATTGGGCTACCTATTTAAACAGGG  
 AGCCTGTATTAGGGGTCAGTCCATGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_008066

**Insert Size:** 1356 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](mailto: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](#)

**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\\_008066.3](#), [NP\\_032092.1](#)

**RefSeq Size:** 2392 bp

**RefSeq ORF:** 1356 bp

**Locus ID:** 14395

**UniProt ID:** [P26048](#)

**Cytogenetics:** 5 37.59 cM

**Gene Summary:** Ligand-gated chloride channel which is a component of the heteropentameric receptor for GABA, the major inhibitory neurotransmitter in the brain (PubMed:27129275). Plays an important role in the formation of functional inhibitory GABAergic synapses in addition to mediating synaptic inhibition as a GABA-gated ion channel (PubMed:27129275). The gamma2 subunit is necessary but not sufficient for a rapid formation of active synaptic contacts and the synaptogenic effect of this subunit is influenced by the type of alpha and beta subunits present in the receptor pentamer (PubMed:27129275). The alpha2/beta2/gamma2 receptor exhibits synaptogenic activity whereas the alpha2/beta3/gamma2 receptor shows very little or no synaptogenic activity (PubMed:27129275).[UniProtKB/Swiss-Prot Function]