

Product datasheet for **MC216110**

Gabra1 (NM_010250) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gabra1 (NM_010250) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gabra1
Synonyms:	GABAA-alpha1; GABAAR-alpha1; Gabra-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC216110 representing NM_010250
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGAAAAGTCGGGGTCTCTCTGACTATCTTTGGGCCTGGACCCTCATTCTGAGCACACTGTCGGGAA
 GAAGCTATGGACAGCCCTCCAAGATGAACTTAAAGACAACCACTGTCTTACAAAGAATTTGGACCG
 ACTGCTGGACGGTTATGACAATCGTCTGAGACCAGGTTTGGGAGAGCGTGAAGTGAAGACCGAC
 ATTTTCGTCAACAGTTTCGGACCAGTTTCAGACCACGATATGGAGTATACAATAGATGTGTTTTCCGTC
 AAAGTTGGAAGGATGAAAGATTAATTAAGGACCCATGACAGTGTCCGGCTAAACAACCTTATGGC
 CAGTAAAACTGGACTCCAGATACATTTTCCACAATGGAAGAAGTCTGTGGCCCAACATGACCATG
 CCTAATAAGCTCCTGCGTATCACAGAGGATGGCACTCTGCTGTACACCATGAGGTTGACCGTGAGAGCTG
 AATGCCAATGCACTTGAAGACTTCCCTATGGATGCCCATGCCCTGCCACTAAAATTCGGAAGCTATGC
 TTATACAAGAGCAGAAGTTGTCTATGAGTGGACCAGAGGCCAGCCGTTCAAGTGTGAGCAGAAGAT
 GGGTCACGTTTAAACCAGTATGACCTTCTGGACAACAGTTGACTCTGGAATTGTTCAAGTCCAGTACTG
 GAGAATATGTGGTTATGACGACTCACTTCCACTTGAAGAGAAAAATTGGCTACTTTGTTATTCAAACATA
 TCTGCCGTGCATAATGACAGTTATTCTCTCCAAGTCTCCTTCTGGCTCAACAGAGAGTCAGTACCAGCA
 AGAAGTGTCTTTGGAGTGACGACTGTTCTGACTATGACAACCTTGAGTATCAGTGCCAGAAAATCCCTCC
 CGAAGGTGGCTTATGCAACAGCTATGGACTGGTTTATTGCAAGTATGCTATGCCTTTGTTTCTCAGCTCT
 GATTGAGTTTCCACAGTAACTATTTCCACAAGAGGGTATGCGTGGGATGGCAAAAGCGTGGTTCCA
 GAAAAGCCAAAGAAAGTAAAGGATCCTCTCATTAAAGAAAAACAACACATATGCTCCTACAGCAACCAAGT
 ATACCCCTAACTTAGCCAGGGGTGACCCCGCTTGGCAACTATTGCTAAAAGTGGACCATAGAACCGAA
 AGAAGTCAAGCCTGAGACAAAACCACGAAACCAAGAAAACCTTAAACAGCGTACAGAAAATCGACCGA
 CTGTCAAGAATAGCCTTTCCGCTGCTATTTGGAATCTTTAACTTAGTCTATTGGCCACGTATTTAAACA
 GAGAGCCTCAGCTAAAAGCCCCACACCCCATCAATAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_010250

Insert Size: 1368 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.

RefSeq: [NM_010250.5](#), [NP_034380.1](#)

RefSeq Size: 4702 bp

RefSeq ORF: 1368 bp

Locus ID: 14394

UniProt ID: [P62812](#)

Cytogenetics: 11 24.97 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 alpha1/beta2/gamma2 receptor and the alpha1/beta3/gamma2 receptor exhibit synaptogenic activity (PubMed:27129275). GABRA1-mediated plasticity in the orbitofrontal cortex regulates context-dependent action selection (PubMed:25348603). Functions also as histamine receptor and mediates cellular responses to histamine (By similarity).[UniProtKB/Swiss-Prot Function]
Transcript Variant: This variant (1) represents the longer transcript. Variants 1 and 2 encode the same protein.