

Product datasheet for SC119668

GABA A Receptor alpha 1 (GABRA1) (NM_000806) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GABA A Receptor alpha 1 (GABRA1) (NM_000806) Human Untagged Clone
Tag:	Tag Free
Symbol:	GABA A Receptor alpha 1
Synonyms:	DEE19; ECA4; EIEE19; EJM; EJM5
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119668 sequence for NM_000806 edited (data generated by NextGen Sequencing)

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ATGAGGAAAAGTCCAGGTCTGTCTGACTGTCTTTGGGCCTGGATCCTCTCTGAGCACA
CTGACTGGAAGAAGCTATGGACAGCCGTCATTACAAGATGAACTTAAAGACAATACCACT
GTCTTACCAGGATTTTGGACAGACTCCTAGATGGTTATGACAATCGCCTGAGACCAGGA
TTGGGAGAGCGTGAACCGAAGTGAAGACTGATATCTTCGTCACCAGTTTCGGACCCGTT
TCAGACCATGATATGGAATATACAATAGATGTATTTTTCCGTCAAAGCTGGAAGGATGAA
AGGTAAAATTTAAAGGACCTATGACAGTCTCCGGTTAAATAACCTAATGGCAAGTAAA
ATCTGGACTCCGGACACATTTTTCCACAATGAAAGAAGTCAGTGGCCACAACATGACC
ATGCCCAACAACTCCTGCGGATCACAGAGGATGGCACCTTGCTGTACACCATGAGGCTG
ACAGTGAGAGCTGAATGTCCGATGCATTTGGAGGACTTCCCTATGGATGCCCATGCTTGC
CCACTAAAATTTGGAAGTTATGCTTATACAAGAGCAGAAGTTGTTTATGAATGGACCAGA
GAGCCAGCACGCTCAGTGGTGTAGCAGAAGATGGATCACGTCTAAACCAGTATGACCTT
CTTGGACAAAACAGTAGACTCTGGAATTGTCCAGTCAAGTACAGGAGAATATGTTGTTATG
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TGCATAATGACAGTGATTCTCTCACAAGTCTCCTTCTGGCTCAACAGAGAGTCTGTACCA
GCAAGAAGTGTCTTTGGAGTAACAAGTGTGCTCACCATGACAACATTGAGCATCAGTGCC
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AGGGGCGACCCGGGCTTAGCCACCATTGCTAAAAGTGCAACCATAGAACCTAAAGAGGTC
AAGCCCGAAAACAAAACCACAGAACCCAAAGAAAACCTTTAACAGTGTGAGCAAAATTGAC
CGACTGTCAAGAATAGCCTTCCCGCTGCTATTTGGAATCTTTAACTTAGTCTACTGGGCT
ACGTATTTAAACAGAGAGCCTCAGCTAAAAGCCCCACACCACATCAATAG

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Clone variation with respect to NM_000806.5



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000806 unedited
 TGTAAACGCTCCTCAGGGCGGCCGCGACTTCGGCACGAGGCTGACTTCTAAAAATCCTCC
 TCTCCCTCTCCCTTTTCTAATCCGAGAATGATGGAGCTCGAGGCAAAGGAATGATTCCG
 GAAATGGAGATATGATTCTAAACCTAGAAAATGATCGGAGTGATTTATTAGTTAAATAT
 TCTTCGTCCAGGAACCCAGCACAAATTCAGAGCTGCAGATTGGATATTGGGAAGCAATTT
 GGGTGTGAAATCTTCAGCAAAGGAGCACGCAGAGTCCATGATGGCTCAGACCAAGTGAGT
 GAGAGGCAGAGCGAGGACGCCCTCTGCTGGCGCGCCCGGACTCGGACTCGCAGACTC
 GTGCTGGCTCCAGTCTCTCCACGATTCTCTCTCCAGACTTTTCCCGGTCTTAAGAGAT
 CCTGTGTCCAGAGGGGCTTAGCTGCTCCAGCCCGCATGAGGAAAAGTCCAGGTCTGT
 CTGACTGTCTTTGGGCTGGATCCTCTCTGAGCACACTGACTGGAAGAAGCTATGGAC
 AGCCGTCAATTACAAGATGAACCTAAAGACAATACCACTGTCTTACCAGGATTTTGGACA
 GACTCCTAGATGGTTATGACAATCGCTGAGACCAGGATTGGGAAGAGCGTGAACCGAA
 GTGAAGACTGATATTCTTCGTCACCAGTTTCGGGACCCGTTTTTCCAGCCATGATATGGGA
 TATACAATAGATGATTTTTTTTCCGTCAAGCTGGAAGGATGGAAGGNTAAAATTAAGG
 GACTTATGAACGGTCCCTCCGGTAAAATAACCTATGGGCAAGAAAATCTGGGACTTCGAC
 ACATTTTTTTCCATGAAAGAAAATAATGGCCACAACATGACCATGCCCAAAAATCCTGG
 GGATAAAAGAAAAGGACCTTTTGTGACACATGAAGGGGAGAGAAAAGA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000806 unedited
 GGCAACCTTCCAGGGCCAGGNANAGCACTGGGGAGGGGTCACAGGGATGCCACCCGGAT
 CTGTTCCAGAAACAGCTATGACCCGCGCCGAATCTAGAGTCGAGTTTTTTTTTTTTTTT
 TTTCTTGGATCTTTGAACCATCTTCCCCTCTTTTCTCTCTCATTCTGTCTCCTTCTGAC
 ATGACTTTGCTCTTTTCGTTGCTCTGTCAAATCCTGTCTCCAAGCTGCATAGTCTGCTT
 TGCTCCAAACTGCCAGACAGGGTCTCTTGTCTTAAATGAATTATGAAAATAAGGAAAC
 TTTCAAATTTTAAAGACAGAGGCAATAAAGCAGATGGGAATTACTGCGTTGAGAACATA
 AATAAATCCCAGTGCAGAGGACTGAACAACAGAATGTGAGTAAAAGATCTATCGCCNN
 CCGNGGGGGCTTTTAGCTGAGGCTCTGTGTTAAATACGTAGCCAGTAGACTAAGTTAA
 AGATTTCAAATAGCAGCGGGAAGGCTATTCTTGACAGTCGGTCAATTTTGCTGACACTGT
 TAAAGTTTTCTTGGGTTCTGGTGGTTTTGTTTCGGGCTTGACCTTTTAGGTTCTATGG
 TTGCACTTTTAAACAATGGTGGCTAAGCCCGGGTCGCCCCGGCCAAATANGGTTANCT
 GGTTGCTGTTGGAGCGTAAGAGTTGTTTTTCTTATAAGAGGATCCTTTACTTTCTTTGCG
 CTTTCTGCAGCCCNNAATCGCCACTCCATGCCATACCTCTTAAATGAAATAGTTTACT
 GTGGCAAACCTCAATCAGAGCTGAGAACAACAAAGGCTTAGCACACGGCAATANACCATCCC
 TTAAGTGGTCCATAACACCTTAGGGAGGGGNTTCTGGCACTGATGCTCAATGTTGT
 CATGGTGGAGCCAGTTGTTCTCCAAAACAGTCTTTGCTGGTAC

Restriction Sites:

NotI-NotI

ACCN:

NM_000806

Insert Size:

2290 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 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_000806.3](#), [NP_000797.2](#)

RefSeq Size: 3678 bp

RefSeq ORF: 1371 bp

Locus ID: 2554

UniProt ID: [P14867](#)

Cytogenetics: 5q34

Domains: Neur_chan_memb, Neur_chan_LBD

Protein Families: Druggable Genome, Ion Channels: Cys-loop Receptors, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

Gene Summary:

This gene encodes a gamma-aminobutyric acid (GABA) receptor. GABA is the major inhibitory neurotransmitter in the mammalian brain where it acts at GABA-A receptors, which are ligand-gated chloride channels. Chloride conductance of these channels can be modulated by agents such as benzodiazepines that bind to the GABA-A receptor. GABA-A receptors are pentameric, consisting of proteins from several subunit classes: alpha, beta, gamma, delta and rho. Mutations in this gene cause juvenile myoclonic epilepsy and childhood absence epilepsy type 4. Multiple transcript variants encoding the same protein have been identified for this gene. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) uses the 5'-most alternate exon in the 5' UTR. Variants 1-7 encode the same protein.