

Product datasheet for **SC121595**

GABA A Receptor gamma 2 (GABRG2) (NM_198903) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GABA A Receptor gamma 2 (GABRG2) (NM_198903) Human Untagged Clone
Tag:	Tag Free
Symbol:	GABA A Receptor gamma 2
Synonyms:	CAE2; DEE74; ECA2; EIEE74; FEB8; GEFSP3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >NCBI ORF sequence for NM_198903, the custom clone sequence may differ by one or more nucleotides

```

ATGAGTTCGCCAAATATATGGAGCACAGGAAGCTCAGTCTACTCGACTCCTGTATTTTCACAGAAAATGA
CGGTGGATTCTGCTCCTGCTGTCGCTCTACCTGGCTTCACTAGCCAGAAAATCTGATGATGACTATGA
AGATTATGCTTCTAACAAAACATGGGTCTTGACTCCAAAAGTTCTGAGGGTGATGTCACGTGCATCTTA
AACAACTGCTGGAAGGATATGACAATAAACTTCGGCCTGATATAGGAGTGAAGCCAACGTTAATTCACA
CAGACATGTATGTGAATAGCATTGGTCCAGTGAACGCTATCAATATGGAATACACTATTGATATATTTTT
TGCGCAAACGTGGTATGACAGACGTTTGAATTTAACAGCACCATTAAAGTCTCCGATTGAACAGCAAC
ATGGTGGGAAAACTGGATTCCAGACACTTTCTCAGAAAATCCAAAAAGCTGATGCACACTGGATCA
CCACCCCAACAGGATGCTGAGAATTTGGAATGATGGTCGAGTGTCTACACCCTAAGGTTGACAATTGA
TGCTGAGTGCCAATTACAATTGCACAACTTCCAATGGATGAACACTCCTGCCCTTGGAGTTCTCCAGT
TGGTCTCGTTCTATTGCCAGGCTGGAATGTGCAGTGGTGTGATCTCGGCTCACTACAGCCTTCGTTCT
GGGCTCAACTGATCCTCCACCTTGGCCTCCAGAGTAGCTGGGATTTCCAGATGGCTATCCACGTGAAGA
AATTGTTTATCAATGGAAGCGAAGTTCTGTTGAAGTGGGCGACACAAGATCCTGGAGGCTTTATCAATTC
TCATTTGTTGGTCTAAGAAATACCACCGAAGTAGTGAAGACAACCTCCGGAGATTATGTGGTCATGTCTG
TCTACTTTGATCTGAGCAGAAGAATGGGATACTTTACCATCCAGACCTATATCCCCTGCACACTCATTGT
CGTCTATCCTGGGTGTCTTTCTGGATCAATAAGGATGCTGTTCCAGCCAGAACATCTTTAGGTATCACC
ACTGTCCTGACATGACCACCCTCAGCACCATTGCCCGGAAATCGCTCCCAAGGTCTCCTATGTCACAG
CGATGGATCTCTTTGATCTGTTTGTTCATCTTTGTCTCTCTGCTCTGGTGGAGTATGGCACCTTGCA
TTATTTTGTGACGACCCGAAACCAAGCAAGGACAAAGATAAAAAAGAAGAAAAACCTCTTCTCGGATG
TTTTCTTCAAGGCCCTACCATTGATATCCGCCAAGATCAGCAACCATTCAAATGAATAATGTACAC
ACCTTCAAGAGAGAGATGAAGAGTACGGCTATGAGTGTCTGGACGCAAGGACTGTGCCAGTTTTTTCTG
CTGTTTTGAAGATTGTGCAACAGGAGCTTGGAGACATGGGAGGATACATATCCGCATTGCCAAAATGGAC
TCCATGCTCGGATCTTCTTCCCACTGCCTTCTGCCTGTTAATCTGGTCTATTGGGTCTCCTACCTCT
ACCTGTGA
    
```

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_198903 unedited

```

GCTTTTGTATACGACTCACTATAGGCGGCCGCAATTCGCACGAGGCCTCGTGCCGAATT
CGGCACGAGTTAAGTCTCCGATGAACAGCACATGGTGGGAAAAATCTGGATTCCAGACA
CTTTCTTCAGAAAATCCAAAAAGCTGATGCACACTGGATCACCACCCCAACAGGATGC
TGAGAATTTGGAATGATGGTCGAGTGTCTACACCCTAAGGTTGACAATTGATGCTGAGT
GCCAATTACAATTGCACAATTTCCAATGGATGAACACTCCTGCCCTTGGAGTTCTCCA
GTTATGGCTATCCACGTGAAGAAATGTTTATCAATGGAAGCGAAGTTCTGTTGAAGTGG
GCGACACAAGATCCTGGAGGCTTATCAATTCATTTGTTGGTCTAAGAAAATACCACCG
AAGTAGTGAAGACAACCTCCGGAGATTATGTGGTCATGTCTGTCTACTTTGATCTGAGCA
GAAGAATGGGATACTTTACCATCCAGACCTATATCCCCTGCACACTCATTGTCGCTCTAT
CCTGGGTGTCTTTCTGGATCAATAAGGATGCTGTTCCAGCCAGAACATCTTTAGGTATCA
CCACTGTCCTGACAAATGACCACCCTCAGCACCATTGCCCGGAAATCGCTCCCAAGGTCT
NCTATGTCACAGCGATGGATCTCNTGNATCTGGTTGGTTCATCTTTGTCTTCTCTGCTC
TGGGNNAGTATGGCACCTTGCAATTATTNTGTCAGCACCGNAAACCAGCAGGACAAGAT
AAAAGAAGAAAAACCTTTCTTTCGATGTTTTCTTTCAGGGCCCTACATTGATATCGCCCC
AGATCAGCACCATCAATGATATGCTACCACCTCAAAAAAATGAAAGACGCTATGANGNCT
GC
    
```

Restriction Sites: NotI-NotI

ACCN: NM_198903

Insert Size: 1600 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_198903.1](#), [NP_944493.1](#)

RefSeq Size: 4077 bp

RefSeq ORF: 984 bp

Locus ID: 2566

UniProt ID: [P18507](#)

Cytogenetics: 5q34

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. GABA-A receptors are pentameric, consisting of proteins from several subunit classes: alpha, beta, gamma, delta and rho. Mutations in this gene have been associated with epilepsy and febrile seizures. Multiple transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (3) encodes the longest isoform (3). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.