

## Specifications:

Gene:	hGABRA1
Accession:	NP_000797
Insert size:	1384bp
Concentration:	10µg at 0.2µg/µL

## Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

## Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

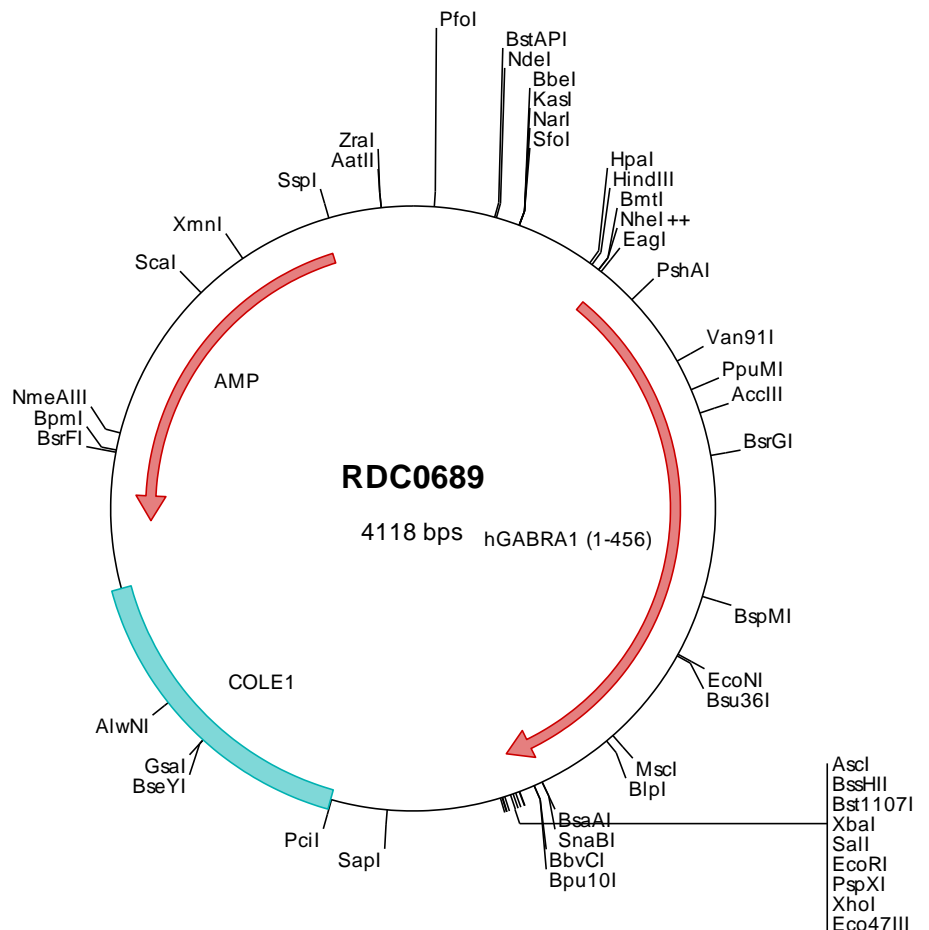
## hGABA-A-R alpha 1 cDNA Plasmid

**GABRA1 gamma-aminobutyric acid (GABA) A receptor, alpha 1 [ *Homo sapiens* (human) ]**

**Also known as:** EJM; ECA4; EJM5

### Summary:

GABRA1 is a gamma-aminobutyric acid (GABA) receptor. GABA is a major inhibitory neurotransmitter in the mammalian brain. It acts at ligand-gated chloride channel GABA-A receptors. GABA-A receptors are pentameric, consisting of proteins from several subunit classes: alpha, beta, gamma, delta and rho. Mutations in GABRA1 cause juvenile myoclonic epilepsy and childhood absence epilepsy type 4.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS



> RDC0689 Plasmid DNA Sequence

1 tcgcgcggtt cggatgatgac ggtgaaaacc tetgacacat gcaagctccc gagacggtea cagcttgtct gtaagcggat gccgggagca gacaagcccg
101 tcaggggcgc tcagcgggtg ttggcgggtg tetggggctgg ctttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
201 ccgcacagat gcgtaaggag aaaataaccg atcaggcgcc attcgccatt caggctgcgc aactgttggg aaggcgatc ggtcggggcc tcttcgctat
301 taaggccagt ggcgaaaggg ggatgtgctg caaggcgatt aagtgggta acgcccagggt ttcccgagtc acgacgttgc aaaacgacgg ccagtgaatt
401 ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgcacc atagggaaaa gtccaggctc gtctgactgt ctttgggcoct ggatccctcct
501 tctgagcaca ctgactggaa gaagctatgg acagccgtca ttacaagatg aacttaaaga caataccact gtcttoacca ggattttgga cagactcocta
601 gatggttatg acaatcgccct gagaccagga ttgggagagc gtgtaaccga agtgaagact gatatactcg tcaccagttt cggaccoggt tcagaccatg
701 atatggaata tacaatagat gtatTTTTTc gtcaaaagctg gaaggatgaa aggttaaaat ttaaaggacc tatgacagtc ctccgggttaa ataacctaat
801 ggcaagtaaa atctggactc cggacacatt ttccacaat ggaaagaagt cagtggccca caacatgacc atgcccaca aactcctgog gataccagag
901 gatggaacct tgcgtgtaacc catgaggctg acagtgagag ctgaaatgtcc gatgcatttg gaggacttcc ctatggatgc ccatgcttgc cactaaaaat
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1501 ccagaaaagc caaagaaagt aaaggatcct ctattaaga aaaaacaacac ttaagctcca acagcaacca gctacacccc taatttggcc aggggagacc
1601 cgggcttagc caccattgct aaaagtgc aaatagaacc taaagaggtc aagcccga aaaccacc agaaccacag aaaaccttta acagtgtcag
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1801 gccccacac cacatcaata aaggcgcgcc agtataactct agagtgcaca cccggggaat tctctgagcg ctctctctca gcttggcgta atcatggtea
1901 tagctgtttc ctgtgtgaaa ttgttatccg ctcaacaattc cacacaacat acgagccgga agcataaagt gtaaagctcg ggtgctctaa tgagttagct
2001 aactcacatt aattgcgttg cgtcactgc ccgctttcca ctgctggaaac ctgctgtgcc agctgcatta atgaatcggc caacgcgcgg ggagaggcgg
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2201 cggttatcca cagaatcagg ggaataaccga gaaagaaca tgtgagcaaa aggccagcaa aaggccagga accgtaaaaa ggcggcggtt ctggcgtttt
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2601 atcgtcttga gtccaaaccg gtaagacaag acttatcgcc actggcagca gccactggta acaggattag cagagcgagg tatgtaggcg gtgctacaga
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3701 agaactttaa aagtgctcat cattgaaaaa cgttcttcgg ggcgaaaaact ctcaagatc ttaaccgtgt tgagatcag tctgatgtaa cccactcgtg
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3901 gaaatgttga atactcaac tcttctcttt tcaatattat tgaagcattt atcagggtta ttgtctcatg agcggataca tatttgaatg tatttagaaa
4001 aataaacaaa taggggttcc gcgcacattt ccccgaaaa gtcacactga cgtctaagaa accattatta tcatgacatt aacctataaa aataggcgta
4101 tcacgaggcc ctttctct

> RDC0689 Translated Insert Sequence

1 mrkspglscd lwawillst ltgrsygqps lqdelkdnt vftrilrdll dgydnrlrpg lgervtevkt difvtsfgpv sdhdmeytid vffrqswkde
101 rlkfkgpmtv lrlnnlmask iwtpdtffhn gkksvahnmt mpnkllrite dgtllytmrl tvraecpmhl edfpmdahac plkfgsyayt raevvyewtr
201 eparsvvaee dgsrlnqydl lgqtvdsqiv qsstgeyvvm tthfhlkrki gyfviqytlp cimtvlsvsq sfwlnresvp artvfgvttv lmttllsisa
301 rnslpkvaya tamdwfiavc yafvfiavc fatvnyftkr gyawdgksvv pekpkvkdp likknntyap tatsytpnla rgdpglatia ksatiepkev
401 kpetkppepk ktfnsvskid rlsiaapl1 fgifnlvywa tylnrepqlk aptphq