

Product datasheet for **RC225762**

GABA A Receptor alpha 1 (GABRA1) (NM_001127643) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GABA A Receptor alpha 1 (GABRA1) (NM_001127643) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GABA A Receptor alpha 1
Synonyms:	DEE19; ECA4; EIEE19; EJM; EJM5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC225762 representing NM_001127643
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGGAAAAGTCCAGGTCTGTCTGACTGTCTTTGGCCTGGATCCTCTCTGAGCACACTGACTGGAA
 GAAGCTATGGACAGCCGTCATTACAAGATGAACCTAAAGACAATACCACTGTCTTACCAGGATTTTGA
 CAGACTCTAGATGGTTATGACAATCGCCTGAGACCAGGATTGGGAGAGCGTGAACCGAAGTGAAGACT
 GATATCTTCGTCACCAGTTTCGGACCCGTTTCAGACCATGATATGGAATATACAATAGATGTATTTTCC
 GTCAAAGCTGGAAGGATGAAAGTTAAAAATTAAGGACCTATGACAGTCTCCGGTTAAATAACCTAAT
 GGCAAGTAAAATCTGGACTCCGGACACATTTTCCACAATGAAAGAAAGTCAGTGGCCACAACATGACC
 ATGCCAACAACTCCTGCGGATCACAGAGGATGGCACCTTGCTGTACCCATGAGGCTGACAGTGAGAG
 CTGAATGCCGATGCATTTGGAGGACTTCCTATGGATGCCATGCTTGGCCACTAAAATTTGGAAGTTA
 TGCTTATAACAAGAGCAGAAGTTGTTTATGAATGGACCAGAGAGCCAGCACGCTCAGTGGTTGTAGCAGAA
 GATGGATCACGTCTAAACCAAGTATGACCTTCTGGACAAACAGTAGACTCTGGAATTGTCCAGTCAAGTA
 CAGGAGAATATGTTGTTATGACCACTCATTTCCTTGAAGAGAAAGATTGGCTACTTTGTTATTCAAAC
 ATACCTGCCATGCATAATGACAGTGATTCTCTACAAGTCTCTTCTGGCTCAACAGAGAGTCTGTACCA
 GCAAGAAGTGTCTTTGGAGTAACAAGTGTGCTCACCATGACAACATTGAGCATCAGTGCCAGAACTCCC
 TCCCTAAGGTGGCTTATGCAACAGCTATGGATTGGTTTATTGCCGTGTGCTATGCCTTTGTGTTCTCAGC
 TCTGATTGAGTTTGCCACAGTAACTATTTCACTAAGAGAGGTTATGCATGGGATGGCAAAAGTGTGTT
 CCAGAAAAGCCAAAGAAAGTAAAGGATCCTCTTATTAAGAAAAACAACACTTACGCTCCAACAGCAACCA
 GCTACACCCCTAATTTGGCCAGGGGCGACCCGGCTTAGCCACCATTGCTAAAAGTGAACCATAGAACC
 TAAAGAGGTCAAGCCCGAAACAAAACCAGAACCCAGAAACCTTTAACAGTGTGAGCAAAAATTGAC
 CGACTGTCAAGAATAGCCTTCCCGCTGCTATTTGGAATCTTTAAGTCTACTGGGCTACGTATTTAA
 ACAGAGAGCCTCAGCTAAAAGCCCCACACCACATCAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC225762 representing NM_001127643
 Red=Cloning site Green=Tags(s)

MRKSPGLSDCLWAWILLSTLTGRSYGQPSLQDELKDNTVFTRILDRLLDGYDNLRPGLGERVTEVKT
 DIFVTSFGPVSDDHMEYIDVFFRQSWKDERLKFPGPMTVLRNLNLMASKIWTPTDFFHNGKKSVAHNMT
 MPNKLLRITEDGTLTYMRLTVRAECPMHLEDFPMDAHACPLKFGSYAYTRAEEVYEWTRPARSVVVAE
 DGSRLNQQYDLLGQTVDSGIVQSSTGEYVVMTHFHLKRIQYFVIQTYLPCIMTVILSQVSWLNRESVP
 ARTVFGVTTVLTMTLSISARNSLPKVAYATAMDWFIAVCYAFVFSALIEFATVNYFTKRGYAWDGKSVV
 PEKPKVKDPLIKKNNTYAPTATSYTPNLARGDPGLATIAKSATIEPKVKPETKPPKPKTFNSVSKID
 RLSRIAFPLLFGIFNLVYWATYLNREPQLKAPTPHQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2436_g04.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001127643

ORF Size: 1368 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001127643.2](#)

RefSeq ORF: 1371 bp

Locus ID: 2554

UniProt ID: [P14867](#)

Cytogenetics: 5q34

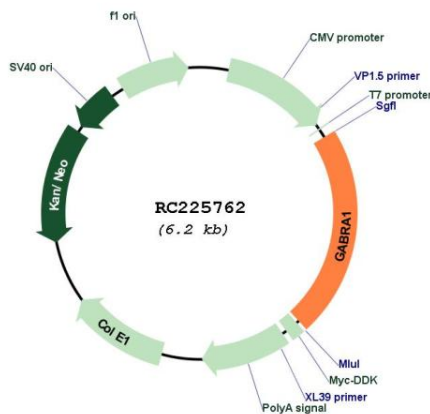
Protein Families: Druggable Genome, Ion Channels: Cys-loop Receptors, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

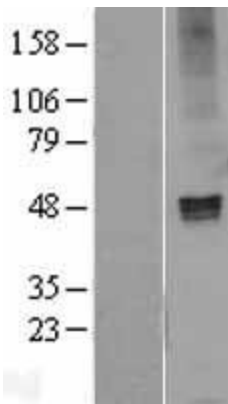
MW: 51.6 kDa

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]

Product images:



Circular map for RC225762



Western blot validation of overexpression lysate (Cat# [LY426831]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225764] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).