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Product datasheet for RC205390

GABA A Receptor alpha 1 (GABRA1) (NM_000806) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GABA A Receptor alpha 1 (GABRA1) (NM_000806) 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)

ORF Nucleotide Sequence:

>RC205390 representing NM_000806
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGAAAAGTCCAGGTCTGTCTGACTGTCTTTGGGCCTGGATCCTCCTTCTGAGCACACTGACTGGAA
GAAGCTATGGACAGCCGTCATTACAAGATGAACTTAAAGACAATACCACTGTCTTCACCAGGATTTTGGA
CAGACTCCTAGATGGTTATGACAATCGCCTGAGACCAGGATTGGGAGAGCGTGTAACCGAAGTGAAGACT
GATATCTTCGTCACCAGTTTCGGACCCGTTTCAGACCATGATATGGAATATACAATAGATGTATTTTTCC
GTCAAAGCTGGAAGGATGAAAGGTTAAAATTTAAAGGACCTATGACAGTCCTCCGGTTAAATAACCTAAT
GGCAAGTAAAATCTGGACTCCGGACACATTTTTCCACAATGGAAAGAAGTCAGTGGCCCACAACATGACC
ATGCCCAACAAACTCCTGCGGATCACAGAGGATGGCACCTTGCTGTACACCATGAGGCTGACAGTGAGAG
CTGAATGTCCGATGCATTTGGAGGACTTCCCTATGGATGCCCATGCTTGCCCACTAAAATTTGGAAGTTA
TGCTTATACAAGAGCAGAAGTTGTTTATGAATGGACCAGAGAGCCAGCACGCTCAGTGGTTGTAGCAGAA
GATGGATCACGTCTAAACCAGTATGACCTTCTTGGACAAACAGTAGACTCTGGAATTGTCCAGTCAAGTA
CAGGAGAATATGTTGTTATGACCACTCATTTCCACTTGAAGAGAAAGATTGGCTACTTTGTTATTCAAAC
ATACCTGCCATGCATAATGACAGTGATTCTCTCACAAGTCTCCTTCTGGCTCAACAGAGAGTCTGTACCA
GCAAGAACTGTCTTTGGAGTAACAACTGTGCTCACCATGACAACATTGAGCATCAGTGCCAGAAACTCCC
TCCCTAAGGTGGCTTATGCAACAGCTATGGATTGGTTTATTGCCGTGTGCTATGCCTTTGTGTTCTCAGC
TCTGATTGAGTTTGCCACAGTAAACTATTTCACTAAGAGAGGTTATGCATGGGATGGCAAAAGTGTGGTT
CCAGAAAAGCCAAAGAAAGTAAAGGATCCTCTTATTAAGAAAAACAACACTTACGCTCCAACAGCAACCA
GCTACACCCCTAATTTGGCCAGGGGCGACCCGGGCTTAGCCACCATTGCTAAAAGTGCAACCATAGAACC
TAAAGAGGTCAAGCCCGAAACAAAACCACCAGAACCCAAGAAAACCTTTAACAGTGTCAGCAAAATTGAC
CGACTGTCAAGAATAGCCTTCCCGCTGCTATTTGGAATCTTTAACTTAGTCTACTGGGCTACGTATTTAA
ACAGAGAGCCTCAGCTAAAAGCCCCCACACCACATCAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205390 representing NM_000806
Red=Cloning site Green=Tags(s)

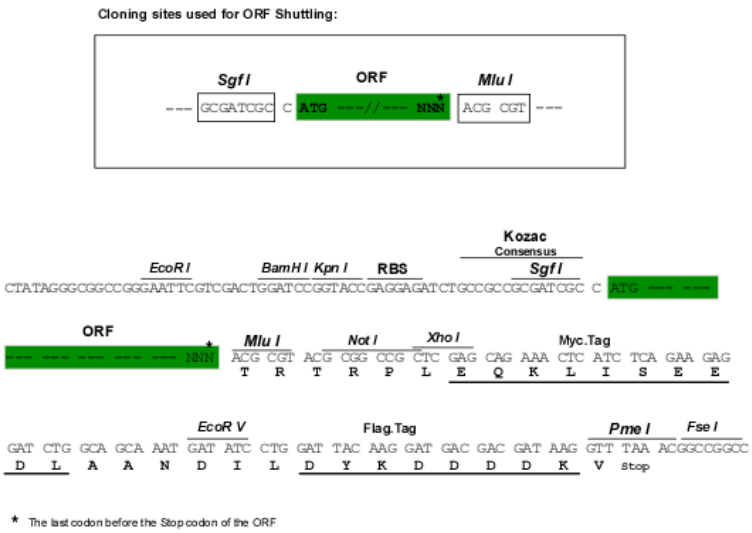
MRKSPGLSDCLWAWILLLSTLTGRSYGQPSLQDELKDNTTVFTRILDRLLDGYDNRLRPGLGERVTEVKT
DIFVTSFGPVSDHDMEYTIDVFFRQSWKDERLKFKGPMTVLRLNNLMASKIWTPDTFFHNGKKSVAHNMT
MPNKLLRITEDGTLLYTMRLTVRAECPMHLEDFPMDAHACPLKFGSYAYTRAEVVYEWTREPARSVVVAE
DGSRLNQYDLLGQTVDSGIVQSSTGEYVVMTTHFHLKRKIGYFVIQTYLPCIMTVILSQVSFWLNRESVP
ARTVFGVTTVLTMTTLSISARNSLPKVAYATAMDWFIAVCYAFVFSALIEFATVNYFTKRGYAWDGKSVV
PEKPKKVKDPLIKKNNTYAPTATSYTPNLARGDPGLATIAKSATIEPKEVKPETKPPEPKKTFNSVSKID
RLSRIAFPLLFGIFNLVYWATYLNREPQLKAPTPHQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000806

ORF Size: 1368 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

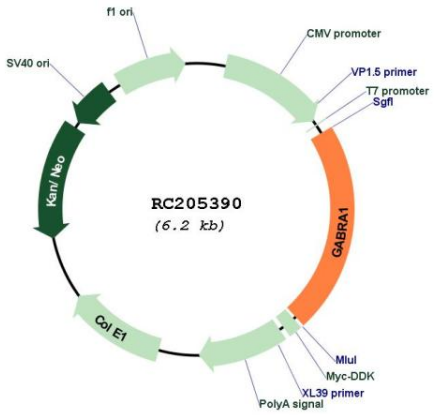
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

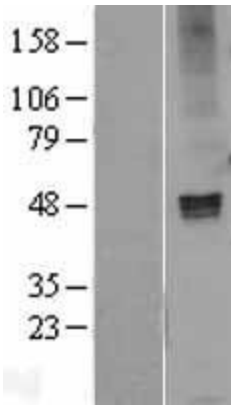
Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000806.5
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
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 RC205390



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