

Product datasheet for **RG225763**

GABA A Receptor alpha 1 (GABRA1) (NM_001127644) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GABA A Receptor alpha 1 (GABRA1) (NM_001127644) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GABRA1
Synonyms:	DEE19; ECA4; EIEE19; EJM; EJM5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG225763 representing NM_001127644
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGGAAAAGTCCAGGTCTGTCTGACTGTCTTTGGCCTGGATCCTCTCTGAGCACACTGACTGGAA
 GAAGCTATGGACAGCCGTCATTACAAGATGAACCTAAAGACAATACCACTGTCTTACCAGGATTTGGGA
 CAGACTCCTAGATGGTTATGACAATCGCCTGAGACCAGGATTGGGAGAGCGTGTAAACGAAGTGAAGACT
 GATATCTTCGTCACCAGTTTCGGACCCGTTTCAGACCATGATATGGAATATACAATAGATGTATTTTCC
 GTCAAAGCTGGAAGGATGAAAGTTAAATTTAAAGGACCTATGACAGTCTCCGGTTAAATAACCTAAT
 GGCAAGTAAAATCTGGACTCCGGACACATTTTCCACAATGAAAGAAAGTCAGTGGCCACACATGACC
 ATGCCCAACAACTCCTGCGGATCACAGAGGATGGCACCTTGCTGTACCCATGAGGCTGACAGTGAGAG
 CTGAATGTCGATGCATTTGGAGGACTTCCTATGGATGCCATGCTTGGCCACTAAAATTTGGAAGTTA
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 ATACCTGCCATGCATAATGACAGTGATTCTCTCAAGTCTCCTTCTGGCTCAACAGAGAGTCTGTACCA
 GCAAGAAGTGTCTTTGGAGTAACAAGTGTGCTCACCATGACAACATTGAGCATCAGTGCCAGAAACTCCC
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 TCTGATTGAGTTTGCCACAGTAACTATTTCACTAAGAGAGGTTATGCATGGGATGGCAAAAGTGTGTT
 CCAGAAAAGCCAAAGAAAGTAAAGGATCCTCTTATTAAGAAAAACAACACTTACGCTCCAACAGCAACCA
 GCTACACCCCTAATTTGGCCAGGGGCGACCCGGCTTAGCCACCATTGCTAAAAGTGAACCATAGAACC
 TAAAGAGGTCAAGCCCGAAACAAAACCAGAACCCCAAGAAAACCTTTAACAGTGTGAGCAAAATTTGAC
 CGACTGTCAAGAATAGCCTTCCCGCTGCTATTTGGAATCTTTAAGTCTACTGGGCTACGTATTTAA
 ACAGAGAGCCTCAGCTAAAAGCCCCACACCACATCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG225763 representing NM_001127644
 Red=Cloning site Green=Tags(s)

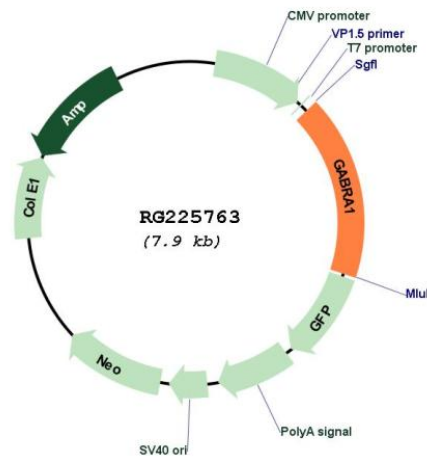
MRKSPGLSDCLWAWILLSTLTGRSYGQPSLQDELKDNTTFVTRILDRLLDGYDNRLRPGLGERVTEVKT
 DIFVTSFGPVS DHMEYIDVFFRQSWKDERLKFKGPMTVLRLNNLMASKIWPDTFFHNGKKSVAHNMT
 MPNKLLRITEDGTLTYMRLTVRAECPMHLEDFPMDAHACPLKFGSYAYTRAEVVYEWTRPARSVVVAE
 DGSRLNQYDLLGQTVDSGIVQSSTGEYVVMTHFHLKRKIGYFVIQTYLPCIMTVILSQVSFWLNRESVP
 ARTVFGVTTVLMTTLSISARNSLPKVAYATAMDWFIACVYAFVFSALIEFATVNYFTKRGYAWDGKSVV
 PEKPKVKDPLIKKNNTYAPTATSYPNLARGDPGLATIAKSATIEPKVKPETKPEPKKTFNSVSKID
 RLSRIAFPLLFGIFNLVYWATYLNREPQLKAPTPHQ

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001127644

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:	<ol style="list-style-type: none">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_001127644.2
RefSeq Size:	4412 bp
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
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]