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Product datasheet for RG225756

GABA A Receptor alpha 1 (GABRA1) (NM_001127647) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GABA A Receptor alpha 1 (GABRA1) (NM_001127647) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GABRA1
Synonyms:	ECA4; EJM; EJM5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG225756 representing NM_001127647
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

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

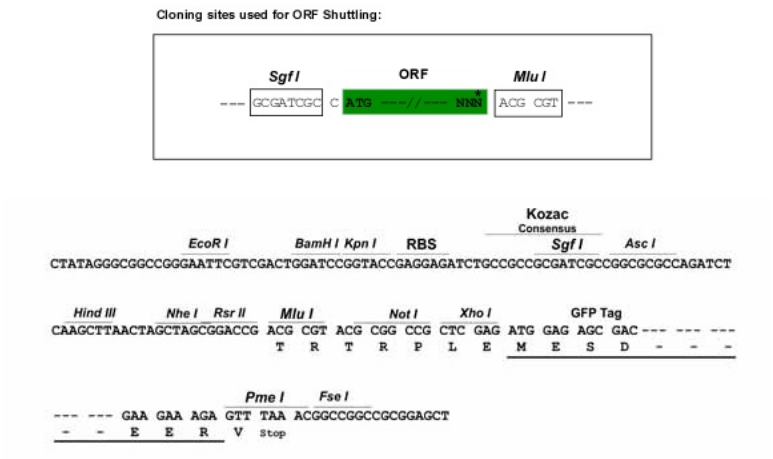
>RG225756 representing NM_001127647
Red=Cloning site Green=Tags(s)

MRKSPGLSDCLWAWILLLSTLTGRSYGQPSLQDELKDNTTVFTRILDRLLDGYDNRLRPGLGERVTEVKT
DIFVTSFGPVSDHDMEYTIDVFFRQSWKDERLKFKGPMTVLRLNNLMASKIWTPDTFFHNGKKSVAHNMT
MPNKLLRITEDGTLLYTMRLTVRAECPMHLEDFPMDAHACPLKFGSYAYTRAEVVYEWTREPARSVVVAE
DGSRLNQYDLLGQTVDSGIVQSSTGEYVVMTTHFHLKRKIGYFVIQTYLPCIMTVILSQVSFWLNRESVP
ARTVFGVTTVLTMTTLSISARNSLPKVAYATAMDWFIAVCYAFVFSALIEFATVNYFTKRGYAWDGKSVV
PEKPKKVKDPLIKKNNTYAPTATSYTPNLARGDPGLATIAKSATIEPKEVKPETKPPEPKKTFNSVSKID
RLSRIAFPLLFGIFNLVYWATYLNREPQLKAPTPHQ

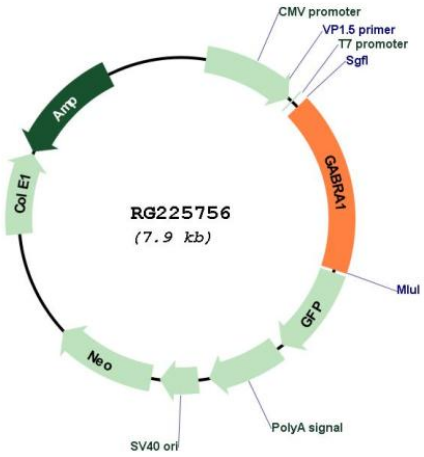
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001127647

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_001127647.1, NP_001121119.1
RefSeq Size:	4223 bp
RefSeq ORF:	1370 bp
Locus ID:	2554
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]