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Product datasheet for RC217467

GABA A Receptor beta 2 (GABRB2) (NM_021911) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GABA A Receptor beta 2 (GABRB2) (NM_021911) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GABA A Receptor beta 2
Synonyms:	DEE92; ICEE2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC217467 representing NM_021911
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGGAGAGTGCGGAAAAGGGGCTACTTTGGGATTTGGTCCTTCCCCTTAATAATCGCCGCTGTCTGTG
CGCAGAGTGTCAATGACCCTAGTAATATGTCGCTGGTTAAAGAGACGGTGGATAGACTCCTGAAAGGCTA
TGACATTCGTCTGAGACCAGATTTTGGAGGTCCCCCCGTGGCTGTGGGGATGAACATTGACATTGCCAGC
ATCGATATGGTTTCTGAAGTCAATATGGATTATACCTTGACAATGTACTTTCAACAAGCCTGGAGAGATA
AGAGGCTGTCCTATAATGTAATACCTTTAAACTTGACTCTGGACAACAGAGTGGCAGACCAGCTCTGGGT
GCCTGATACCTATTTCCTGAACGATAAGAAGTCATTTGTGCACGGAGTGACTGTTAAGAACCGCATGATT
CGCCTGCATCCTGATGGCACCGTCCTTTATGGACTCAGAATCACAACCACAGCTGCCTGCATGATGGACC
TAAGGAGGTACCCACTGGATGAACAAAACTGCACCTTGGAAATTGAGAGCTATGGATACACAACTGATGA
CATTGAGTTTTACTGGCGTGGCGATGATAATGCAGTAACAGGAGTAACGAAAATTGAACTTCCACAGTTC
TCTATTGTAGATTACAAACTTATCACCAAGAAGGTTGTTTTTTCCACAGGTTCCTATCCCAGGTTATCCC
TCAGCTTTAAGCTTAAGAGAAACATTGGCTACTTTATCCTGCAAACATACATGCCTTCCATCCTGATTAC
CATCCTCTCCTGGGTCTCCTTCTGGATTAATTACGATGCTTCAGCTGCAAGGGTGGCATTAGGAATCACA
ACTGTCCTCACAATGACCACAATCAACACCCACCTCCGGGAAACTCTCCCTAAAATCCCCTATGTGAAGG
CCATTGACATGTACCTGATGGGGTGCTTTGTCTTCGTTTTCATGGCCCTTCTGGAATATGCCCTAGTCAA
CTACATCTTCTTTGGGAGGGGGCCCCAACGCCAAAAGAAAGCAGCTGAGAAGGCTGCCAGTGCCAACAAT
GAGAAGATGCGCCTGGATGTCAACAAGATTTTTTATAAAGATATTAAACAAAATGGGACCCAATATCGAT
CCTTGTGGGACCCTACTGGAAACCTCTCCCCAACTAGACGGACTACCAATTACGATTTCTCTCTGTATAC
GATGGACCCCCATGAGAACATCTTACTGAGCACTCTCGAGATAAAAAATGAAATGGCCACATCTGAGGCT
GTGATGGGACTTGGAGACCCCAGAAGCACAATGCTAGCCTATGATGCCTCCAGCATCCAGTATCGGAAAG
CTGGGTTGCCCAGGCATAGTTTTGGCCGAAATGCTCTGGAACGACATGTGGCGCAAAAGAAAAGTCGCCT
GAGGAGACGCGCCTCCCAACTGAAAATCACCATCCCTGACTTGACTGATGTGAATGCCATAGATCGGTGG
TCCCGCATATTCTTCCCAGTGGTTTTTTCCTTCTTCAACATCGTCTATTGGCTTTATTATGTGAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217467 representing NM_021911
Red=Cloning site Green=Tags(s)

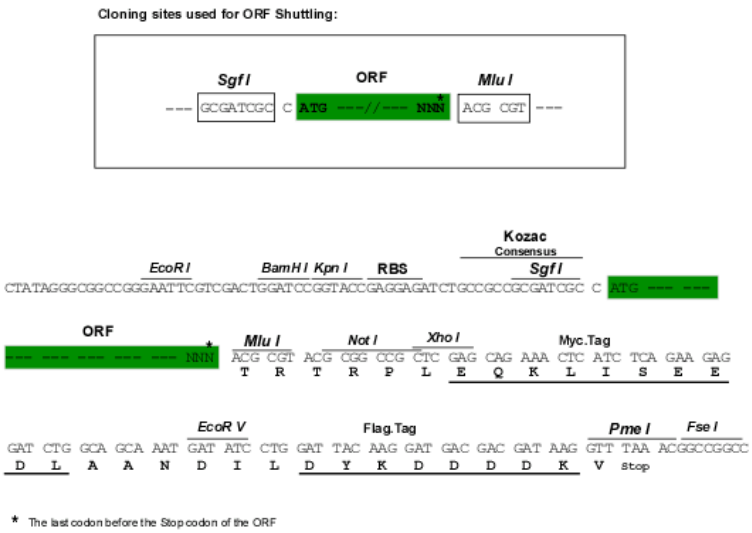
MWRVRKRGYFGIWSFPLIIAAVCAQSVNDPSNMSLVKETVDRLLKGYDIRLRPDFGGPPVAVGMNIDIAS
IDMVSEVNMDYTLTMYFQQAWRDKRLSYNVIPLNLTLDNRVADQLWVPDTYFLNDKKSFVHGVTVKNRMI
RLHPDGTVLYGLRITTTAACMMDLRRYPLDEQNCTLEIESYGYTTDDIEFYWRGDDNAVTGVTKIELPQF
SIVDYKLITKKVVFSTGSYPRLSLSFKLKRNIGYFILQTYMPSILITILSWVSFWINYDASAARVALGIT
TVLTMTTINTHLRETLPKIPYVKAIDMYLMGCFVFVFMALLEYALVNYIFFGRGPQRQKKAAEKAASANN
EKMRLDVNKIFYKDIKQNGTQYRSLWDPTGNLSPTRRTTNYDFSLYTMDPHENILLSTLEIKNEMATSEA
VMGLGDPRSTMLAYDASSIQYRKAGLPRHSFGRNALERHVAQKKSRLRRRASQLKITIPDLTDVNAIDRW
SRIFFPVVFSFFNIVYWLYYVN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6707_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021911

ORF Size: 1536 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.

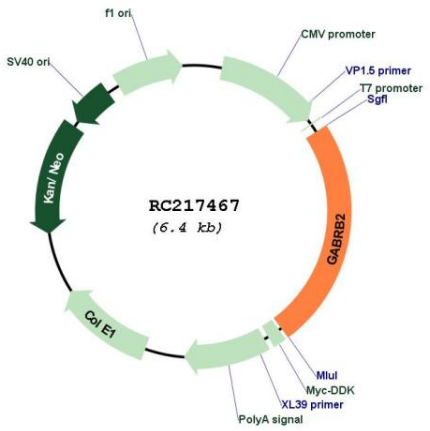
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

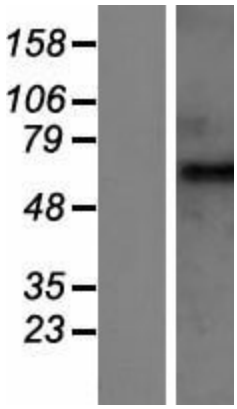
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq:	NM_021911.2
RefSeq Size:	1974 bp
RefSeq ORF:	1539 bp
Locus ID:	2561
UniProt ID:	P47870
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:	59 kDa
Gene Summary:	The gamma-aminobutyric acid (GABA) A receptor is a multisubunit chloride channel that mediates the fastest inhibitory synaptic transmission in the central nervous system. This gene encodes GABA A receptor, beta 2 subunit. It is mapped to chromosome 5q34 in a cluster comprised of genes encoding alpha 1 and gamma 2 subunits of the GABA A receptor. Alternative splicing of this gene generates 2 transcript variants, differing by a 114 bp insertion. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC217467



Western blot validation of overexpression lysate (Cat# [LY411881]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217467 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).