

Product datasheet for **MR222856**

Gabrb3 (NM_008071) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gabrb3 (NM_008071) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gabrb3
Synonyms:	A230092K12Rik; AW049585; beta3; Cp1; Gabrb-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR222856 representing NM_008071
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTGGGGCTTTGCGGGAGGAAGGCTTTTCGGCATCTTCTCGGCCCGGTGCTGGTGGCGGTGGTTTGCT
 GCGCTCAGAGCGTAAACGACCCCGGAACATGTCTTTGTGAAGGAGACGGTCGACAAGCTGTTGAAAGG
 CTACGACATTCGCTGAGACCCGACTTCGGGGTCCCCAGTCTGCGTGGGGATGAACATCGACATCGCC
 AGCATCGACATGGTTTCTGAAGTCAACATGGATTATACCTTAACTATGTATTTCCAACAATACTGGAGAG
 ATAAAAGGCTCGCTATTCTGGGATCCCTCTCAACCTCACGCTTGACAATCGAGTGGCTGACCAGCTCTG
 GGTGCCGACACATATTTCTAAATGACAAAAAGTCATTTGTCCACGGAGTGACAGTGAAAAACCGCATG
 ATCCGCTCCACCCTGATGGGACAGTGTGTATGGGCTCAGGATCACTACGACAGCAGCGTGCATGATGG
 ACCTCAGAAGATACCCACTGGATGAGCAAACTGCACTTTGAAATTGAAAGCTATGGCTACACTACGGA
 TGACATTTGAATTTACTGGCGTGGCGGGACAAGGCTGCTACTGGCGTGGAAAGGATCGAGCTCCCACAG
 TTCTCCATTGTAGAGCACCGTCTGGTCTCCAGGAATGTTGTCTTCGCCACAGGTGCCTATCTCGACTTT
 CATTGAGTTTTCGGTTGAGAGAAATATCGGGTACTTCATTCTTCAGACGTATATGCCCTCAATCCTGAT
 CACAATCCTCTCGTGGGTGTCCTTCTGGATCAATTACGATGCATCTGCTGCTCGAGTTGCCCTTGGGATT
 ACCACCGTGCTCACCATGACAACCATCAACTCACCTTCGGGAGACTCTACCCAAAATTCCTATGTCA
 AAGCCATCGACATGTACCTGATGGGCTGCTTTGTCTTTGTATTCTGGCACTTCTGGAGTACGCCTTTGT
 CAACTACATTTCTTTGGAAGAGGTCCCAAAGGCAGAAGAAGCTTGGGAGAAGACAGCCAAGGCCAAG
 AATGATCGTTCTAAGAGTGAAATAAACCGGTGGATGCTCACGGGAATATCTATTAGCACCGATGGATG
 TTCACAATGAAATGAATGAGGTTGCAGGCAGCGTTGGTGACACCAGGAATTCAGCAATATCCTTTTGAC
 CTCAGGAATCCAGTATAGGAAACAGAGCATGCCCAAGGAAGGGCATGGGCGGTACATGGGAGACAGAAGC
 ATCCCGACAAGAAGACCCACCTACGGAGGAGTCTTCACAGCTCAAAATCAAAATCCCTGATCTAACCG
 ATGTGAATGCCATAGACAGATGGTCCCGCATCGTGTTCATTACCTTTTCTCTCTTCAATTTAGTTTA
 CTGGCTGTACTATGTTAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222856 representing NM_008071
 Red=Cloning site Green=Tags(s)

MWGFAGGRLFGIFSAPVLVAVVCCAQSVNDPGNMSFVKETVDKLLKGYDIRLRPDFGGPPVCGMNI
 SIDMVSEVNMDYTLTMYFQQYWRDKRLAYSGIPLNLTLDNRVADQLWVPDITYFLNDKKSFVHGVTVKNRM
 IRLHPDGTVLYGLRITTTAACMMDLRRYPLDEQNCTLEIESYGYTTDDIEFYWRGGDKAVTGVERIELPQ
 FSIVEHRLVSRNVFATGAYPRLSLSFRLKRNIGYFILQTYMPSILITILSWVSWINYDASAARVALGI
 TTVLTMTTINTHLRETLPKIPYVKAIDMYLMGCFVFLALLEYAFVNYIFFGRGPQRQKLAEKTAKAK
 NDRSKSEINRVDAHGNILLAPMDVHNEMNEVAGSVGDTRNSAISFDNSGIQYRKQSMPKEGHGRYMGDRS
 IPHKKTHLRRRSSQLKIKIPDLTDVNAIDRWSRIVFPFTFSLFNLVYWL YVYN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9030_a06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

ACCN: NM_008071

ORF Size: 1419 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.

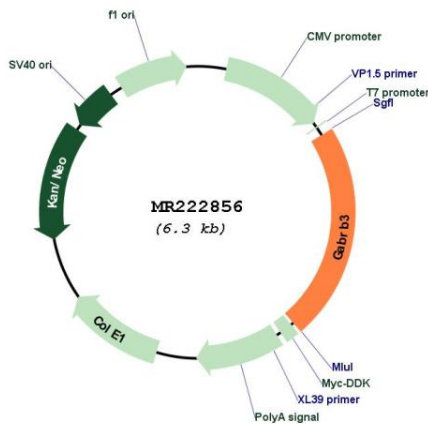
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_008071.3, NP_032097.1](#)
RefSeq Size: 5568 bp
RefSeq ORF: 1422 bp
Locus ID: 14402
UniProt ID: [P63080](#)
Cytogenetics: 7 33.53 cM
MW: 54.6 kDa

Gene Summary: Ligand-gated chloride channel which is a component of the heteropentameric receptor for GABA, the major inhibitory neurotransmitter in the brain (PubMed:9108119). Plays an important role in the formation of functional inhibitory GABAergic synapses in addition to mediating synaptic inhibition as a GABA- gated ion channel (PubMed:27129275). The gamma2 subunit is necessary but not sufficient for a rapid formation of active synaptic contacts and the synaptogenic effect of this subunit is influenced by the type of alpha and beta subunits present in the receptor pentamer (PubMed:27129275). The alpha1/beta3/gamma2 receptor exhibits synatogenic activity whereas the alpha2/beta3/gamma2 receptor shows very little or no synaptogenic activity (PubMed:27129275). Functions also as histamine receptor and mediates cellular responses to histamine (By similarity). Plays an important role in somatosensation and in the production of antinociception (PubMed:10670447). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222856