

Product datasheet for **MG222858**

Gabrb3 (NM_001038701) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gabrb3 (NM_001038701) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gabrb3
Synonyms:	A230092K12Rik; AW049585; beta3; Cp1; Gabrb-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG222858 representing NM_001038701
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGCTCCGGGCTCCAGGCCCTGCTGCTGCCAATCTGGCTTTCCTGGACCCTGGGGACGCGAGGATCTG
 AGCCAGCAGCGTAAACGACCCCGGAACATGTCTTTGTGAAGGAGACGGTCGACAAGCTGTTGAAAGG
 CTACGACATTCGCTGAGACCCGACTTCGGGGTCCCCAGTCTGCGTGGGGATGAACATCGACATCGCC
 AGCATCGACATGGTTTCTGAAGTCAACATGGATTATACCTTAACTATGTATTTCCAACAATACTGGAGAG
 ATAAAAGGCTCGCTATTCTGGGATCCCTCTCAACCTCACGCTTGACAATCGAGTGGCTGACCAGCTCTG
 GGTGCCCGACACATTTTCTAAATGACAAAAAGTCATTTGTCCACGGAGTGACAGTGAAAAACCGCATG
 ATCCGCCCTCCACCCTGATGGGACAGTGTGTATGGGCTCAGGATCACTACGACAGCAGCGTGCATGATGG
 ACCTCAGAAGATACCCACTGGATGAGCAAACTGCACTTTGAAATTGAAAGCTATGGCTACACTACGGA
 TGACATTTGAATTTACTGGCGTGGCGGGACAAGGCTGCTACTGGCGTGGAAAGGATCGAGCTCCCACAG
 TTCTCCATTGTAGAGCACCGTCTGGTCTCCAGGAATGTTGTCTTCGCCACAGGTGCCTATCCTCGACTTT
 CATTGAGTTTTCGGTTGAGAGAAATATCGGGTACTTCATTCTTCAGACGTATATGCCCTCAATCCTGAT
 CACAATCCTCTCGTGGGTGTCCTTCTGGATCAATTACGATGCATCTGCTGCTCGAGTTGCCCTTGGGATT
 ACCACCGTGCTCACCATGACAACCATCAACTCACCTTCGGGAGACTCTACCCAAAATTCCTATGTCA
 AAGCCATCGACATGTACCTGATGGGCTGCTTTGTCTTTGTATTCTGGCACTTCTGGAGTACGCCTTTGT
 CAACTACATTTCTTTGGAAGAGGTCCCAAAGGCAGAAGAAGCTTGGGAGAAGACAGCCAAGGCCAAG
 AATGATCGTTCTAAGAGTGAAATAAACCGGTGGATGCTCACGGGAATATCCTATTAGCACCGATGGATG
 TTCACAATGAAATGAATGAGGTTGCAGGCAGCGTTGGTGACACCAGGAATTCAGCAATATCCTTTGACAA
 CTCAGGAATCCAGTATAGGAAACAGAGCATGCCCAAGGAAGGGCATGGGCGGTACATGGGAGACAGAAGC
 ATCCCGCACAGAAGACCCACCTACGGAGAGGTCTTCACAGCTCAAAATCAAAATCCCTGATCTAACCG
 ATGTGAATGCCATAGACAGATGGTCCCGCATCGTGTTCATTACCTTTTCTCTCTTCAATTTAGTTTA
 CTGGCTGTACTATGTTAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG222858 representing NM_001038701
 Red=Cloning site Green=Tags(s)

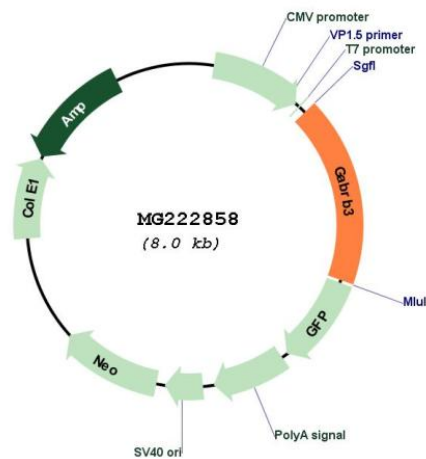
MCSGLQALLLPWL SWTLGTRGSEPSSVNDPGNMSFVKETVDKLLKGYDIRLRPDFGGPPVCVGMNIDIA
 SIDMVSEVNMDYTL TMYFQQYWRDKRLAYSGIPLNLTLDNRVADQLWVPDITYFLNDKKS FVHGVTVKNRM
 IRLHPDGTVL YGLRITTTAACMMDLRRYPLDEQNCTLEIESYGYTTDDIEFYWRGGDKAVTGVERIELPQ
 FSIVEHRLVSRNVVFATGAYPRLSLSFRLKRNIGYFILQTYMPSILITILSWVSFWINYDASAARVALGI
 TTVL TMTTINTHLRETLPKIPYVKAIDMYLMGCFVFLALLEYAFVNYIFFGRGPQRQKLAEKTA KAK
 NDRSKSEINRVDAHGNILLAPMDVHNEMNEVAGSVGDTRNSAISFDNSGIQYRKQSMPKEGHGRYMGDRS
 IPHKKTHLRRRSSQLKIKIPDLTDVNAIDRWSRIVFPFTFSLFNLVYWL YVYN

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001038701

ORF Size: 1419 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_001038701.2](#), [NP_001033790.1](#)

RefSeq Size: 5500 bp

RefSeq ORF: 1422 bp

Locus ID: 14402

Cytogenetics: 7 33.53 cM

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 synaptogenic 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]