

Product datasheet for **MC222832**

Gabbr1 (NM_019439) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gabbr1 (NM_019439) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gabbr1
Synonyms:	bM573K1.1; GABAB1; GABABr1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF:

>MC222832 representing NM_019439
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTGCTGCTGCTGCTGGTGCCTCTCTTCCCTCCGCCCTGGGCGCTGGCGGGGCTCAGACCCCCAACG
 TCACCTCGGAAGTTGCCAGATTATACATCCGCCCTGGGAAGGTGGCATCAGGTACCGTGGCTTGACTCG
 CGACCAGGTGAAGGCCATCAATTTCTGCTGTGGACTATGAGATTGAATATGTGTGCCGGGGCGAACGC
 GAGGTGGTGGGGCCCAAGGTGCGCAAGTGCCTGGCCAACGGCTCCTGGACGGATATGGACACACCCAGTC
 GCTGTGTCCGAATCTGCTCCAAGTCTTATTTGACCCTGGAAAAATGGGAAGTTTTCTGACGGGTGGGA
 CCTCCCAGCTCTGGATGGAGCCCGGTGGATTTCCGATGTGACCCGACTTCCATCTGGTGGCAGCTCC
 CGGAGCATCTGTAGTCAGGGCCAGTGGAGCACCCCAAGCCCACTGCCAGGTGAATCGAACGCCACACT
 CAGAACGGCGTGCAGTATACATCGGGCGCTGTTCCCATGAGCGGGGGTGGCCGGGGGCCAGGCCCTG
 CCAGCCTGCGGTGGAGATGGCGCTGGAGGACGTTAACAGCCGCAGAGACATCCTGCCGGACTACGAGCTC
 AAGCTTATCCACCACGACAGCAAGTGCACCCAGGGCAAGCCACCAAGTACTTGTATGAACACTACTTACA
 ACGACCCCATCAAGATCATCCTCATGCCCGGCTGCAGCTCTGTGTCCACACTGGTAGCCGAGGCTGCCCC
 GATGTGGAACCTTATTGTGCTCTCATATGGCTCCAGCTCACAGCCTTGTCAAACCGACAGCGGTTTCCA
 ACGTTCTTTCCGACACATCCATCCGCCACACTCCACAATCCCACCCGGGTGAAACTCTTCGAAAAGTGGG
 GCTGGAAGAAGATTGCCACCATCCAGCAGACTACCGAGGTCTTCACTCAACACTGGATGACCTGGAGGA
 GCGAGTGAAAGAGGCTGGGATTGAGATCACTTTTCGACAGAGTTTCTTCTCAGATCCAGCTGTGCCTGTT
 AAAAACCTGAAGCGTCAAGATGCTCGAATCATCGTGGGACTTTTCTATGAGACCGAAGCCCGAAAAGTTT
 TTTGTGAGGTCTATAAGGAACGGCTCTTTGGGAAGAAGTATGTCTGGTTTCTCATCGGTTGGTATGCTGA
 CAACTGGTTCAAAACCTATGACCCGTCATCAATTGTACAGTAGAAGAGATGACTGAGGCGGTGGAGGGC
 CATATACCACCGAGATTGTCATGCTGAACCCTGCCAACACCCGAAGCATTTC AACATGACATCACAGG
 AATTTGTGGAGAACTAACCAAGCGCTGAAAAGACACCTGAGGAGACTGGAGGCTTCCAGGAGGCACC
 ACTGGCCTATGATGCTATCTGGGCCTTGCCCTTTGGCCTTGAACAAGACCTCTGGAGGAGGTGGCCGTTCA
 GGAGTGCCTGGAGGACTTTAACTACAACAACCAGACCATTACAGACCAAACTACCAGGCCATGAACT
 CCTCCTCTTTGAGGGTGTCTTGGCCACGTGGTCTTTGATGCCAGCGGCTCCCGGATGGCATGGACGCT
 TATCGAGCAGCTACAGGGCGGCAGCTACAAGAAGATCGGCTACTACGACAGCACCAAGGATGATCTTTCC
 TGGTCCAAAACAGACAAGTGGATCGGAGGGTCTCCCCAGCCGACCAGACCTTGGTCATCAAGACATTCC
 GTTTCCTGTACAGAAACTCTTTATCTCCGTCTCAGTTCTCTCCAGCCTGGGCATTGTTCTTGTCTTGT
 CTGCTGTCTTTAACATCTACAACCTCCACGTTCTGTTATATCCAGAACTCCCAGCCCACTGAACAAT
 CTGACTGCTGTGGGCTGCTCACTGGCACTAGCTGCTGTCTTCCCCCTTGGGCTGGATGGTTACCACATAG
 GGAGAAGCCAGTCCCATTTGTCTGCCAGGCCGCTTTGGCTCTTGGGCTTAGGCTTTAGTCTGGGCTA
 TGGCTCTATGTTACCAAGATCTGGTGGTCCACACAGTCTTCAAAAAGAGGAGGAGAAGAAGGAATGG
 AGGAAGACCCTAGAGCCTTGAAACTGTACGCCACTGTAGGCCTGCTGGTGGGCATGGATATCCTGACTC
 TTGCCATCTGGCAGATTGTGACCCCTTGACCCGAACATTGAGACTTTTGCCAAGGAGGAACCAAAGGA
 AGACATTGATGTCTCCATTCTGCCCCAGCTGGAGCACTGCAGCTCCAAGAAGATGAATACATGGCTCGGC
 ATTTTCTATGGTTACAAAGGGCTGCTGCTGCTGCTGGAATCTTTCTTGCATTATGAGACCAAAAGTGTGT
 CCACTGAAAAGATCAATGACCACAGGGCGTGGGCATGGCTATCTACAATGTTGCGGTCCTGTGTCTCAT
 TACCGCTCCTGTACCATGATCCTTTCCAGCCAGCAGGACGCAGCCTTCGCCTTTGCCTCTCTGGCCATT
 GTGTTCTCTTCTACATTACTCTGGTTGTGCTCTTTGTGCCTAAGATGCGCAGGTTGATCACTCGAGGTG
 AATGGCAGTCTGAAGCACAGGACACAATGAAAACAGGATCATCCACCAACAACAATGAGGAAGAGAAGTC
 CCGACTGTTGGAGAAGGAAAACCGTGAATTGAAAAGATCATCGCCGAGAAAGAGGAGCGTGTCTCTGAA
 CTGCGCCATCAGCTCCAGTCTCGGCAGCAGATCCGCTCCCGCGCCACCCCCAACACCCCCAGACCCCT
 CTGGGGCCCTTCCAGGGGACCCTCAGAGCCCCCTGACCGGCTTAGCTGTGATGGGAGTCGAGTACATTT
 GCTTTACAAG**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_019439
Insert Size:	2883 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_019439.3 , NP_062312.3
RefSeq Size:	4486 bp
RefSeq ORF:	2883 bp
Locus ID:	54393
UniProt ID:	Q9WV18
Cytogenetics:	17 19.16 cM
Gene Summary:	Component of a heterodimeric G-protein coupled receptor for GABA, formed by GABBR1 and GABBR2 (PubMed:10773016, PubMed:10075644). Within the heterodimeric GABA receptor, only GABBR1 seems to bind agonists, while GABBR2 mediates coupling to G proteins (By similarity). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors, such as adenylate cyclase (PubMed:10773016, PubMed:10075644). Signaling inhibits adenylate cyclase, stimulates phospholipase A2, activates potassium channels, inactivates voltage-dependent calcium-channels and modulates inositol phospholipid hydrolysis (PubMed:10075644). Calcium is required for high affinity binding to GABA (By similarity). Plays a critical role in the fine-tuning of inhibitory synaptic transmission (By similarity). Pre-synaptic GABA receptor inhibits neurotransmitter release by down-regulating high-voltage activated calcium channels, whereas postsynaptic GABA receptor decreases neuronal excitability by activating a prominent inwardly rectifying potassium (Kir) conductance that underlies the late inhibitory postsynaptic potentials (PubMed:10075644). Not only implicated in synaptic inhibition but also in hippocampal long-term potentiation, slow wave sleep, muscle relaxation and antinociception (By similarity).[UniProtKB/Swiss-Prot Function]