

Product datasheet for **MC222756**

Gabbr2 (NM_001081141) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gabbr2 (NM_001081141) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gabbr2
Synonyms:	GABABR2; Gb2; Gm425; Gpr51
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF:

>MC222756 representing NM_001081141

Red=Cloning site Blue=ORF Orange=Stop codon

 TTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTTCCCGCCGAGCTCCGGCAGCCCGCCCGCCGCCACCGCCGCCCGCCGCGCTGTCTGC
 TGCCCTGCTGCTGTCGTTGCTGCTGTCGTTGGCTCCCGGGCCTGGGGCTGGGCGGGGGCCCCCG
 GCCCGCCAGCAGCCCGCTCTCCATCATGGGCCTCATGCCGCTACCAAGGAGGTGGCAAGGGC
 AGCATCGGGCGGGCTGCTCCCGCCGTGGAGTAGCCATCGAGCAGATCCGCAACGAGTCACTCCTGC
 GCCCTACTTCTGGACTGCGACTCTACGACCCGAGTGTGACAATGCAAAGGGACTGAAAGCCTTCTA
 TGATGCAATAAAGTATGGGCCGAACATTTGATGGTGTGGAGGCGTGTCCGCTGTACACCTATC
 ATCGGGAATCCCTCAAGGCTGGAACCTGGTGCAGCTTCTTCGCGCCACCACGCTGTTCTTGCGG
 ATAAGAAGAAGTACCCATATTTCTCCGGACGGTCCCTCAGACAACCGGTGAACCCGGAATCCTGAA
 GCTGCTGAAGCACTTCCGCTGGCGGCGCTGGGCACACTCAGCAGGACGTGCAGCGCTTCTCCGAGGTG
 AGGAACGACCTGACTGGGGTTCTGTACGGGAAGACATTGAGATCTCAGACACGGAGAGCTTCTCCAATG
 ATCCCTGCACCAGCGTCAAAAAGCTCAAGGGGAACGACGTGCGGATCATCCTTGGCCAGTTTGACCAGAA
 CATGGCAGCGAAAGTCTTCTGTTGTGCCTTTGAGGAGAGCATGTTTGGCAGCAAGTACCAGTGGATCATC
 CCGGGCTGGTACGAGCCTGCGTGGTGGGAACAGGTGCACGTGGAGGCCAACTCCTCACGCTGCTGCGCA
 GGAGCCTCCTGGCTGCCATGGAAGGCTACATCGGAGTGGACTTCGAGCCCTGAGCTCCAAACAAATCAA
 GACCATTCAGGGAAGACTCCACAGCAATACGAAAGAGAATAACAACAGCAAGCGTTCGGGTGAGGGCCC
 AGCAAGTCCATGGGTATGCCTACGATGGCATCTGGGTTCATCGCAAGACCCTGCAGAGGGCCATGGAGA
 CACTGATGCCAGTAGCAGGCACCGGATCCAGGACTTCAACTACACAGACCACACCTGGGCGAAT
 CATCCTCAACGCCATGAACGAAACCAACTTCTTCGGAGTACGGGTCAAGTTGTGTTCCGGAACGGGGAA
 AGAATGGGAACCATTAATTTACTCAATTTCAAGACAGCAGAGAGGTGAAGGTGCGCGAGTACAACGCTG
 TGGCTGACACACTGGAGATCATCAACGACACCATAAGGTTCCAGGGGTGCGAGCCACCAAGGACAAGAC
 CATCATTCTAGAGCAGCTTCGGAAGATCTCGTTCCTACTGTATAGCATCCTGTCAGCTCTCACTATCCTC
 GGCATGATCATGGCCAGCGCCTTCTCTTCAACATCAAGAACCGGAACCAAAAGCTGATCAAGATGT
 CAAGCCCTATATGAACAACCTCATCATCTGGGTGGGATGCTGTCTATGCATCCATCTCCTCTTTGG
 TCTCGATGGATCCTTCGCTCAGAAAAGACCTTTGAAACACTCTGCACGGTCCGGACCTGGATTCTCACC
 GTGGGCTACACAACCGCCTTTGGAGCCATGTTTCAAAGACCTGGAGGGTCCATGCCATCTTCAAAAATG
 TGAATAAGAAAGAAGATCATCAAGACAGAAAGCTGCTCGTGATTGTGGGGGGCATGCTGCTGATCGA
 TCTGTGCATCCTGATCTGCTGGCAGGCTGTGGACCCCTGCGGAGGACAGTGGAGCGGTACAGCATGGAG
 CCGGACCCAGCAGGACGGGACATCTCCATCCGCCACTGCTGGAACACTGCGAAAACACCCACATGACCA
 TCTGGCTCGGCATTGTCTACGCTACAAGGGGCTCCTCATGTTGTTCCGTTGTTTCTTAGCATGGGAAAC
 CCGCAACGTGAGCATCCCTGCCCTCAACGACAGCAAGTACATTGGGATGAGTGTGTAACAATGTGGGGATC
 ATGTGCATCATCGGGCCCGCTCCTTCCTGACACGTGACCAGCCACGTGCAGTTCTGCATCGTGG
 CCCTGGTTCATCATCTTCTGTAGCACCATCACTCTGCCTGGTGTGTTGTGCCAAAGCTCATCACTCTGAG
 GACAAACCTGACGCAGCCACTCAGAACAGGCGATTCCAGTTCACACAGAACCAGAAGAAAGAAAGATTG
 AAGACCTCCACCTCAGTACCAGCGTGAACAGGCGAGCACGTACGCCTGGAGGGACTGCAGTCAGAAA
 ACCACCGCTACGAATGAAGATCACAGAGCTGGACAAAGACTTGAAGAAGTACCCATGCAGCTACAAGA
 CACACCAGAGAAGACCACATACATCAAACAGAATCACTACCAAGAGCTCAACGACATCCTCAGCTTGGC
 AACTTCACAGAGACAGATGGAGGAAAGGCCATTCTAAAAAATCACCTCGATCAAACCTCAGCTCC
 AGTGAACACGACCGAGCCCTCAAGAACATGCAAAGACCCATAGAGGACATCAACTCCCCAGACACAT
 CCAGCGCCGGCTGTCCCTCCAGCTCCCCATCCTCCACCACGCTACCTCCCGTCCATTGGAGGCGTGGAC
 GCCAGCTGCGTCAGCCCCTGTGTCAGCCCTACAGCCAGCCCTCGCCACAGACACGTACCACCTCCTTCC
 GAGTCATGGTCTCGGGCT**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:	NM_001081141
Insert Size:	2823 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_001081141.1 , NP_001074610.1
RefSeq Size:	3998 bp
RefSeq ORF:	2823 bp
Locus ID:	242425
UniProt ID:	Q80T41
Cytogenetics:	4 B1
Gene Summary:	Component of a heterodimeric G-protein coupled receptor for GABA, formed by GABBR1 and GABBR2 (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:10075644). Signaling inhibits adenylate cyclase, stimulates phospholipase A2, activates potassium channels, inactivates voltage-dependent calcium-channels and modulates inositol phospholipid hydrolysis (PubMed:10075644). 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]