

Product datasheet for **MG211314**

Gabbr1 (NM_019439) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gabbr1 (NM_019439) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gabbr1
Synonyms:	bM573K1.1; GABAB1; GABAbr1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG211314 representing NM_019439
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTGCTGCTGCTGCTGGTGCCTCTCTTCCGCCCCCTGGGCGCTGGCGGGGCTCAGACCCCCAACG
 TCACCTCGGAAGGTTGCCAGATTATACATCCGCCCTGGGAAGGTGGCATCAGGTACCGTGGCTTGACTCG
 CGACCAGGTGAAGGCCATCAATTTCTGCTGTGGACTATGAGATTGAATATGTGTGCCGGGGCGAACGC
 GAGGTGGTGGGGCCCAAGGTGCGCAAGTGCCTGGCCAACGGCTCCTGGACGGATATGGACACACCCAGTC
 GCTGTGTCCGAATCTGCTCCAAGTCTTATTTGACCCTGGAAAAATGGGAAGGTTTTCTGACGGGTGGGA
 CCTCCCAGCTCTGGATGGAGCCCGGTGGATTTCCGATGTGACCCGACTTCCATCTGGTGGCAGCTCC
 CGGAGCATCTGTAGTCAGGGCCAGTGGAGCACCCCAAGCCCACTGCCAGGTGAATCGAACGCCACACT
 CAGAACGGCGTGCAGTATACATCGGGCGCTGTTCCCATGAGCGGGGGTGGCCGGGGGCCAGGCCTG
 CCAGCCTGCGGTGGAGATGGCGCTGGAGGACGTTAACAGCCGCAGAGACATCCTGCCGGACTACGAGCTC
 AAGCTTATCCACCACGACAGCAAGTGCACCCAGGGCAAGCCACCAAGTACTTGTATGAACACTACTTACA
 ACGACCCCATCAAGATCATCCTCATGCCCGGCTGCAGCTCTGTGTCCACACTGGTAGCCGAGGCTGCCCC
 GATGTGGAACCTTATTGTGCTCTCATATGGCTCCAGCTCACAGCCTTGTCAAACCGACAGCGGTTTCCA
 ACGTTCTTTCCGACACATCCATCCGCCACACTCCACAATCCCACCCGGGTGAAACTCTTCGAAAAGTGGG
 GCTGGAAGAAGATTGCCACCATCCAGCAGACTACCGAGGCTTTCACCTCAACACTGGATGACCTGGAGGA
 GCGAGTGAAAGAGGCTGGGATTGAGATCACTTTTCGACAGAGTTTCTTCTCAGATCCAGCTGTGCCTGTT
 AAAAACCTGAAGCGTCAAGATGCTCGAATCATCGTGGGACTTTTCTATGAGACCGAAGCCCGAAAGTTT
 TTTGTGAGGTCTATAAGGAACGGCTCTTTGGGAAGAAGTATGTCTGGTTTCTCATCGGGTGGTATGCTGA
 CAACTGGTTCAAACCTATGACCCGTCATCAATTTGTACAGTAGAAGAGATGACTGAGGCGGTGGAGGGC
 CATATACCACCGAGATTGTCATGCTGAACCCTGCCAACACCCGAAGCATTTCACATGACATCACAGG
 AATTTGTGGAGAACTAACCAAGCGCTGAAAAGACACCCTGAGGAGACTGGAGGCTTCCAGGAGGCACC
 ACTGGCCTATGATGCTATCTGGGCCTTGGCTTTGGCCTGAACAAGACCTCTGGAGGAGGTGGCCGTTCA
 GGAGTGCCTGGAGGACTTTAACTACAACAACCAGACCATTACAGACCAAATCTACCGGCCATGAACT
 CCTCCTCTTTGAGGGTGTCTTGGCCACGTGGTCTTTGATGCCAGCGGCTCCCGGATGGCATGGACGCT
 TATCGAGCAGCTACAGGGCGGCAGCTACAAGAAGATCGGCTACTACGACAGCACCAAGGATGATCTTTCC
 TGGTCCAAAACAGACAAGTGGATCGGAGGCTCCTCCAGCCGACCAGACCTTGGTCATCAAGACATTCC
 GTTTCCTGTACAGAAACTCTTTATCTCCGTCTCAGTTCTCTCCAGCCTGGGCATTGTTCTGTCTGTGT
 CTGCTGTCTTTAACATCTACAACCTCCACGTTCTGTTATATCCAGAACTCCCAGCCCAACTGAACAAT
 CTGACTGCTGTGGGCTGCTCACTGGCACTAGCTGCTGTCTTCCCCTTGGGCTGGATGGTTACCACATAG
 GGAGAAGCCAGTTCCTATTTGTCTGCCAGGCCGCTTTGGCTCTTGGGCTTAGGCTTTAGTCTGGGCTA
 TGGCTCTATGTTACCAAGATCTGGTGGTCCACACAGTCTTCAAAAAGAGGAGGAGAAGAAGGAATGG
 AGGAAGACCCTAGAGCCTTGAAACTGTACGCCACTGTAGGCCTGCTGGTGGGCATGGATATCCTGACTC
 TTGCCATCTGGCAGATTGTGACCCCTTGACCCGAACATTGAGACTTTTGCCAAGGAGGAACCAAAGGA
 AGACATTGATGTCTCATTCTGCCCCAGCTGGAGCACTGCAGCTCCAAGAAGATGAATACATGGCTCGGC
 ATTTTCTATGGTTACAAAGGGCTGCTGCTGCTGCTGGGAATCTTTCTTGGTTATGAGACCAAAGTGTGT
 CCACTGAAAAGATCAATGACCACAGGGCGTGGGCATGGCTATCTACAATGTTGCGGTCCTGTGTCTCAT
 TACCGCTCCTGTACCATGATCCTTTCCAGCCAGCAGGACGCAGCCTTCGCCTTTGCCTCTCTGGCCATT
 GTGTTCTCTTCTACATTACTCTGGTTGTGCTCTTTGTGCCTAAGATGCGCAGGTTGATCACTCGAGGTG
 AATGGCAGTCTGAAGCACAGGACACAATGAAAACAGGATCATCCACCAACAACAATGAGGAAGAGAAGTC
 CCGACTGTTGGAGAAGGAAAACCGTGAATTGAAAAGATCATCGCCGAGAAAGAGGAGCGTGTCTCTGAA
 CTGCGCCATCAGCTCCAGTCTCGGCAGCAGATCCGCTCCCGCGCCACCCCCAACACCCCCAGACCCCT
 CTGGGGCCCTTCCAGGGGACCCTCAGAGCCCCCTGACCGGCTTAGCTGTGATGGGAGTCGAGTACATTT
 GCTTTACAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG211314 representing NM_019439
 Red=Cloning site Green=Tags(s)

```

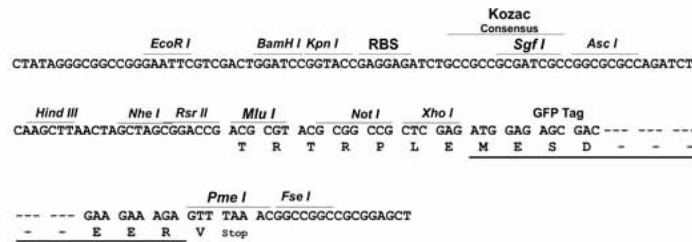
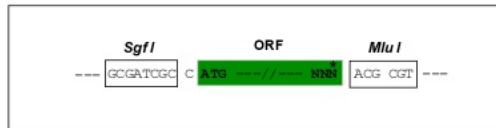
MLLLLLVPLFLRPLGAGGAQTPNVTSEGCQIIHPPWEGGIRYRGLTRDQVKAINFLPVDYEIEYVCRGER
EVVGPVKRKCLANGSWTDMTPSRCVIRICSKSYLLENGKVFLTGGDLPALD GARVDFRCDDPFDHLVGSS
RSICSQGWSTPKPHCQVNRTPHSERRAVYIGALFPMSSGGWPGGQACQPAVEMALD VNSRRDILPDYEL
KLIHHSKCDPGQATKYL YELL YNDPIKIIILMPGCCSSVSTLVAEARMWNLIVLSYGSSSPALSNRQRF
TFFRTHPSATLHNPTRVKLFEKWGWKKIATIQQTTTEVFTSTLDDLEERVKEAGIEITFRQSFSDPAVPV
KNLKRQDARIIVGLFYETEARKVFCEVYKERLFGKKYVWFLIGWYADNWFKTYDPSINCTVEEMTEAVEG
HITTEIVMLNPANTRSISNMTSQEFVEKLTKR LKRHPEETGGFQEAPLAYDAIWALALALNKTSGGGGRS
GVRLEDFNYNNQITTDQIYRAMNSSSFEVSGHVVDASGSRMAWTLIEQLQGGSYKKIGYYDSTKDDLS
WSKTDKWIGGSPADQTLVIKTRFLSQKLFISVSVLSSLGIVLAVVCLSFNIYNSHVRYIQNSQPNLNN
LTAVGCSLALAAVFLPLDGYHIGRSQFPFVCQARLWLLGLGFSLGYGSMFTKIWWWHTVFTKKEEKKEW
RKTLEPWKLYATVGLLVGMDILTLAIWQIVDPLHRTIETFAKEEPKEDIDVSILPQLEHCSKMMNTWLG
IFYGYKGLLLLLGIFLAYETKSVSTEKINDHRAVGMAYNVAVLCLITAPVTMILSSQDAAFASFALAI
VFSSYITLVVLFVPMRRLITRGEWQSEAQDTMKTGSSTNNNEEEKSRLLLEKENRELEKIIAEKEERVSE
LRHQLQSRQQIRSRRHPTPPDPSSGGLPRGPSEPPDRLSCDGSRVHLLYK
  
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

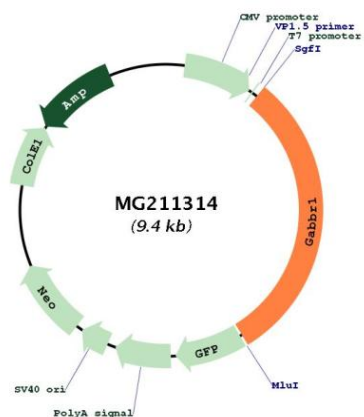


ACCN: NM_019439

ORF Size: 2880 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:	<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:	<p>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]</p>

Product images:



Circular map for MG211314