

Product datasheet for **MG222118**

Glra1 (NM_020492) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glra1 (NM_020492) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Glra1
Synonyms:	nmf11; oscillator; ot; spasmodic; spd
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG222118 representing NM_020492
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTACAGCTTCAATACTCTGCGATTCTACCTTTGGGAGACCATTGTATTCTTCAGCCTTGCTGCTTCCA
 AAGAGGCTGAAGCCGCCGCTCCGCACCCAAGCCTATGTACCCTCGGACTTCTGGATAAGCTCATGGG
 GAGGACTTCTGGGTATGACGCCAGGATCAGGCCAACTTTAAAGGTCCTCCTGTGAACGTAAGTTGCAAC
 ATCTTCATCAACAGTTTCGGTTCCATCGCTGAGACAACCATGGACTATAGGGTCAACATCTTCTGAGGC
 AGCAGTGGAAACGACCCCGTCTGGCCTACAATGAATACCCTGATGACTCTCTGGACCTTGACCCATCTAT
 GTTGGATTCCATCTGGAAGCCTGACTTGTCTTTGCCAATGAGAAGGGGGCCACTTCCACGAAATCACC
 ACGGACAACAACTGCTAAGAATCTCCCGAATGGCAATGTCCTCTACAGCATCAGAATCACCTGACGC
 TGGCCTGCCCCATGGACCTGAAGAAATTTCCCGATGGATGTACAGACGTGTATCATGCAACTCGAAAGCTT
 TGGATATACCATGAACGACCTCATCTTTGAGTGGCAGGAGCAAGGAGCTGTGCAGGTGGCAGACGGACTG
 ACCTGCCTCAGTTTATTCTGAAGGAAGAGAAAGACCTGAGATACTGCACCAAGCACTACAACACAGGTA
 AATTACCTGCATCGAGGCCGATTCCACCTGGAGCGGCAGATGGGCTACTACCTGATCCAGATGTACAT
 CCCCAGCTGCTCATCGTCATCCTGTCTGGATCTCCTTCTGGATCAACATGGATGCTGCACCAGCTCGT
 GTGGGGCTGGGCATCACCACAGTGTCCACATGACCACACAGAGCTCTGGCTCCCAGCCTCCCTACCCA
 AGGTGTCTACGTGAAAGCTATTGACATTTGGATGGCTGTTTGCCTGCTCTTCTGCTTCTGCTGCCCTGCT
 GGAGTACGCCCGCTCACTTTGTGTCTCGGCAACACAAGGAAGTCTTCGATTTAGGAGGAAGAGGCGA
 CATCACAAGGATGATGAGGGTGGAGAAGGCCGCTTCAACTTCTCTGCCTATGGGATGGGCCAGCCTGTC
 TGCAGGCCAAGGATGGCATCTCTGTCAAGGGTGCCAACAACAACACCACTAACCCGCCTCTGCGCC
 ATCCAAGTCCCCGAGGAGATGCGGAAACTCTTCATCCAGAGAGCCAAGAAGATCGACAAGATATCTCGC
 ATCGGTTTCCCCATGGCCTTCTCATCTTCAACATGTTCTACTGGATCATCTATAAGATCGTCCGGAGAG
 AGGATGTCCACAACAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG222118 representing NM_020492
 Red=Cloning site Green=Tags(s)

MYSFNTLRFYLVETIVFFSLAASKEAEAARSAPKPMSPSDFLDKLMGRTSGYDARIRPNFKGPPVNVSCN
 IFINFSFGSIAETTMDYRVNIFLRQQWNPRLAYNEYPDSDLDLPSMLDSIWKPDLFFANEKGAHFHEIT
 TDNKLLRISRNGNVLYSIRITLTLACPMDLKNFPMQVQTCIMQLESFGYTMNDLIFEWQEQGAVQVADGL
 TLPQFILKEEKDLRYCTKHYNTGKFTCIARFHLERQMGYYLIQMYIPSLLLIVILSWISFWINMDAAPAR
 VGLGITTVLMTTQSSGSRASLPKVSIVKAIIDIMAVCLLFVFSALLEYAAVNFVSRQHKELLRFRKRKR
 HHKDEGGEGRFNF SAYGMGPAQLQAKDGISVKANNNTTNPAPSKSPEEMRKLFIQRAKKIDKISR
 IGFPMAFLIFNMFYWIYKIVRREDVHNK

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_020492

ORF Size: 1347 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).

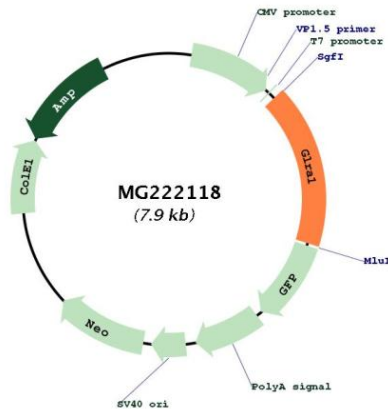
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_020492.2](#)

RefSeq Size: 1407 bp
RefSeq ORF: 1350 bp
Locus ID: 14654
Cytogenetics: 11 33.12 cM
Gene Summary:

Glycine receptors are ligand-gated chloride channels. Channel opening is triggered by extracellular glycine (PubMed:16672662, PubMed:17114051, PubMed:24801766). Channel opening is also triggered by taurine and beta-alanine (By similarity). Channel characteristics depend on the subunit composition; heteropentameric channels are activated by lower glycine levels and display faster desensitization (By similarity). Plays an important role in the down-regulation of neuronal excitability (PubMed:9145798). Contributes to the generation of inhibitory postsynaptic currents (PubMed:16672662, PubMed:17114051, PubMed:24801766). Channel activity is potentiated by ethanol. Potentiation of channel activity by intoxicating levels of ethanol contribute to the sedative effects of ethanol (PubMed:24801766).
 [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG222118