

## Product datasheet for **MG225583**

### **Gria1 (NM\_001113325) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gria1 (NM_001113325) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gria1
Synonyms:	2900051M01Rik; Glr-1; Glr1; GluA1; Glur-1; GluR-A; gluR-K1; Glur1; GluRA; HIPA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG225583 representing NM\_001113325  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCGTACATCTTTGCCTTTTTCTGCACCGTTTTCTAGGTGCGGTTGTGGGTGCCAATTTCCCAACA  
 ATATCCAGATAGGGGATTATTTCCAAACCAACAATCACAGGAACATGCGGCTTTTAGGTTTGCTTTGTC  
 ACAACTCACGGAGCCCCCAAGCTGCTTCCCCAGATCGATATTGTGAACATCAGCGACAGCTTTGAGATG  
 ACTTACCGATTCTGTTCCAGTTCTCCAAAGGAGTGACGCCATCTTTGGATTTTATGAACGAAGGACTG  
 TCAACATGCTGACCTCCTTCTGTGGGGCCTCCATGTGTGCTTCATCACTCCAAGTTTTCCCGTTGACAC  
 ATCCAATCAGTTTGTCTTCAGCTGCGCCGGAACACAGGAAGCTCTCATTAGCATTATCGACCATTAC  
 AAGTGGCAGACTTTTGTCTACATTTATGATGCTGACCGGGCCTGTCAGTCTGCAGAGAGTCTTGATA  
 CAGCCCGCGAGAAGAAGTGGCAGGTGACGGCTGTCAACATTCTAACACCCAGGAGGAAGGATACCGGAT  
 GCTCTTTCAGGACCTGGAGAAGAAAAGGAGAGGCTGGTGGTGGTGGACTGTGAATCAGAACGCCTCAAC  
 GCCATCCTGGGCCAGATTGTGAAGCTAGAAAAGAACGGCATCGGGTACCACTACATCCTCGCCAACCTGG  
 GCTTCATGGACATTGACTTAAATAAGTTCAAGGAGAGTGGAGCCAATGTGACAGGTTTTCCAACTGGTGAA  
 CTACACAGACAGATCCCAGCCAGAATCATGCAGCAGTGGAGGACAAGTGACGCTCGGGACCACACCAGG  
 GTGGACTGGAAGAGGCCAAAGTACACTTCTGCTTACCTATGATGGTGTGAAGGTGATGGCGGAGGCCCT  
 TCCAGAGCCTGCGGAGGCAGAGGATTGACATATCCCGGCGAGGGAATGCTGGGGACTGTCTGGCTAACCC  
 AGCTGTGCCCTGGGGCCAAGGGATCGACATCCAGAGAGCCCTGCAGCAGGTGCGCTTTGAAGTTTGACA  
 GGAAATGTGCAGTTTAAACGAGAAAGGGCGCCGACCAACTACACCCTCCATGTGATCGAAATGAAGCATG  
 TGGAGGGGACAACCTCAAGCGTCCAGAATAAGAACCTACATCGTCAGGACTATCCTCGAAGATCCTTACGTTG  
 ATGCTTAAAAAGAAATGCCAACCAATTTGAAGGCAATGACCGCTATGAGGGCTACTGCGTGGAACTGGCTG  
 CGGAGATCGCCAAGCACGTGGGCTATTCTACCGACTTGAGATTGTGAGCGACGGCAAAACGGAGCCCG  
 GGATCCTGACACAAGGCCTGGAATGGCATGGTGGGAGAGCTAGTCTATGGAAGAGCAGATGTGGCGGTG  
 GCCCCTTGACCATAACCTTGGTCCGGGAGGAAGTCACTGACTTCTCCAAGCCATTCATGAGTTTGGGAA  
 TCTCCATTATGATTAAGAAGCCACAGAAGTCCAAGCCAGGTGCTTCTCCTTTCTTGACCCTTTGGCCTA  
 CGAGATCTGGATGTGTATAGTGTTCCTACATTGGAGTGAGCGTCGCTCTTCTCTGTCAGCCGTTTC  
 AGTCTTATGAATGGCACAGTGAAGAGTTTGAAGAAGGACGAGATCAGACAACCAGTGACCAGTCAAATG  
 AGTTTGGCATATTC AACAGCCTGTGTTCTCGCTGGGGCCTTCATGCAGCAAGGATGTGACATTTCCCC  
 CAGGTCCTGTCTGGACGCATCGTCGGCGGTGTCTGGTGGTTCTTCACTTTGATTATCATCTCCTCATA  
 ACAGCCAACCTGGCTGCCTTCTGACTGTGAAAGGATGGTGTCTCCCATCGAGAGTGCAGAGGACCTGG  
 CAAAGCAGACGGAATGCTTATGGGACATTGGAAGCAGGATCCACTAAGGAGTTCTTCAGGAGGTCTAA  
 AATCGCTGTGTTGAGAAGATGTGGACATACATGAAGTCTGCAGAACCGTCTGTGTTTGTTCGGACCACA  
 GAGGAGGGCATGATCAGAGTGAGAAAGTCTAAAGGCAAAATAGCCTACCTCCTGGAGTCCACCATGAATG  
 AGTACATTGAGCAACGCAAGCCCTGTGACACCATGAAAGTGGGAGGTAACCTGGATTCCAAGGCTATGG  
 CATTGCAACACCCAAGGGGTCCGCCCTGAGAGGTCCCGTAAACCTAGCGGTTTTGAAACTCAGTGAGCAA  
 GCGCTCTTAGACAAGCTGAAAAGCAAATGGTGGTACGATAAAGGGGAATGTGGAAGCAAGGACTCCGGAA  
 GTAAGGACAAGACCAGTCTCTGAGCCTGAGCAATGTGGCAGGCGTGTCTACATCCTGATTGGAGGGCT  
 GGGATTGGCCATGCTGGTTGCCTTAATCGAGTTCTGCTACAAATCCCGTAGCGAGTCGAAGCGGATGAAG  
 GTTTTCTGTTGATTCCACAGCAATCCATCAATGAAGCCATACGGACATCGACCTCCCCAGGAACAGCG  
 GGGCAGGAGCCAGCGGAGGAAGTGGCAGTGGAGAGAATGGCAGAGTGGTCAAGGACTCCCCAAGTC  
 CATGCAATCCATTCCCTGCATGAGCCACAGTTCAGGGATGCCCTGGGAGCCACAGGATTG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – **GTTTAA**

**Protein Sequence:** >MG225583 representing NM\_001113325  
 Red=Cloning site Green=Tags(s)

MPYIFAFFCTGFLGAVVGANFPNNIQIGGLFPNQSQEHAARFALSQTTEPPKLLPQIDIVNISDSFEM  
 TYRFCSQFSKGVYAIIFGFYERRTVNMLTSFCGALHVCFITPSFPVDTSNQFVLQLRPELQEALISIIDHY  
 KWQTFVYIYDADRGLSVLQRVLDTAAEKNWQVTAVNILTTTEGYRMLFQDLEKKKERLVVVDCESERLN  
 AILGQIVKLEKNGIGYHYILANLGFMDIDLNFKFKESGANVTGFQLVNYTDTIPARIMQQWRTSDARDHTR  
 VDWKRPKYTSALTYDGVKMAEAFQSLRRQRIDISRRGNAGDCLANPAVPWQGQIDIQRALQQVRFEGLT  
 GNVQFNEKGRRTNYTLHVIEMKHDGIRKIGYWNEDDKFVPAATDAQAGDNSSVQNRTYIVTTILEDPYV  
 MLKKNANQFEGNDRYEGYCVELAAEIAKHVGYRLEIVSDGKYGARDPDTKAWNGMVGELVYGRADVAV  
 APLTITLVREEVIDFSKPFMSLGISIMIKPKQKSKPGVFSFLDPLAYEIWMCIVFAYIGVSVVFLVSRF  
 SPYEWHSSEEFEGRDQTTSDQSNFEGIFNSLWFSLGAFMQGCDISPRSLSGRIVGGVWVFFTLIISSY  
 TANLA AFLTVERMVSPIESAEDLAKQTEIAYGTLEAGSTKEFFRRSKIIVFEKMWTYMKSAEPSVFRVT  
 EEGMIRVRKSKGKYAYLLESTMNEYIEQRKPCDTMKVGGNLDKSGYGIATPKGSALRGPVNLAVLKLSEQ  
 GVLDKLKSWWWYDKGECGSKDSGSKDKTSALSLSNVAGVFYILIGGLGLAMLVALIEFCYKSRSESKRMK  
 GFCLIPQQSINEAIRTSTLPRNSGAGASGGSGSGENGRVVSQDFPKSMQSI PCMSHSSGMPLGATGL

TRTRPLE - GFP Tag - V

**Restriction Sites:**

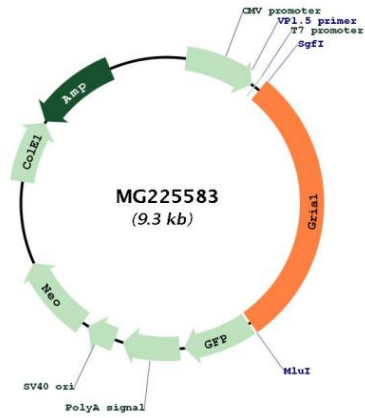
Sgfl-MluI

**Cloning Scheme:**



<b>ACCN:</b>	NM_001113325
<b>ORF Size:</b>	2721 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001113325.2</a> , <a href="#">NP_001106796.1</a>
<b>RefSeq Size:</b>	5755 bp
<b>RefSeq ORF:</b>	2724 bp
<b>Locus ID:</b>	14799
<b>UniProt ID:</b>	<a href="#">P23818</a>
<b>Cytogenetics:</b>	11 34.51 cM
<b>Gene Summary:</b>	Ionotropic glutamate receptor. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. Binding of the excitatory neurotransmitter L-glutamate induces a conformation change, leading to the opening of the cation channel, and thereby converts the chemical signal to an electrical impulse. The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist. In the presence of CACNG4 or CACNG7 or CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of glutamate.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG225583