

Product datasheet for **MG227068**

Gria2 (NM_001039195) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gria2 (NM_001039195) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gria2
Synonyms:	Glu; GluA2; GluR; Glur-2; GluR-B; gluR-K2; Glur2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG227068 representing NM_001039195
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCAAAAGATTATGCATATTTCTGTCCTCTTTCTCCTGTTTTATGGGACTGATTTTTGGTGTCTCTT
 CTAACAGCATACAGATAGGGGGCTATTTCCAAGGGCGCTGATCAAGAATACAGTGCATTTCCGGTAGG
 GATGGTTCAGTTTTCCACTTCGGAGTTCAGACTGACACCCCATATCGACAATTTGGAGGTAGCCAACAGT
 TTCGCAGTCACCAATGCTTTCTGCTCCCAGTTTTCAAGAGGCGTCTATGCGATTTTTGGGTTTTACGACA
 AGAAGTCTGTAATACCATCACATCATTCTGTGGGACTGCATGTATCCTTCATCACACCAAGCTTCCC
 AACAGATGGCAGCATCCATTTGTCATCCAGATGCGACCTGACCTCAAAGGAGCACTCCTTAGCTTGATT
 GAGTACTACCAATGGGATAAGTTCGCATACCTCTATGACAGTACAGAGGCTTATCAACTGCAAGCTG
 TGCTGGATTCTGCTGCGGAGAAGAAGTGGCAGGTGACTGCTATCAATGTGGGAACATTAACAATGACAA
 GAAAGATGAGACCTACAGATCACTCTTTCAAGATCTGGAGTTAAAAAAGAACGGCGTGAATCCTTGAC
 TCGGAAAAGGATAAAGTCAATGACATTGTGGACAGGTTATTACCATGGAAAGCATGTTAAAGGGTACC
 ATTATATCATTGCAAATCTGGGATTTACTGATGGAGACCTGCTGAAAATTCAGTTTGGAGGAGCAAATGT
 CTCTGGATTTAGATTGTAGACTACGACGACTCCCTGGTGTCTAAATTTATAGAAAAGATGGTCAACACTC
 GAAGAGAAAAGAAATACCCTGGAGCACACAGCGACAATTAAGTATACTTCGGCCCTGACTTATGATGCTG
 TCCAAGTGATGACTGAAGCATTCCGCAATCTTCGGAAGCAGAGGATTGAAATCTCCAGGAGAGGAAATGC
 AGGAGATTGTTGGCCAACCCAGCTGTGCCTTGGGACAAGGCGTGGAAATAGAAAAGGCCCTCAAGCAG
 GTTCAAGTTGAAGTCTCTCTGGAATATAAAATTTGACCAGAACGAAAAACGAATAAATACACAATTA
 ACATCATGGAGCTCAAAACAAATGGACCCCGAAGATTGGTACTGGAGTGAAGTGGATAAAATGGTTGT
 CACCCTAACCGAGCTCCCTCTGGAATGACACATCTGGGCTTGA AAAACAAAACCTGGTTGTACCACA
 ATATTGGAATCTCCATATGTTATGATGAAGAAAAATCATGAAATGCTTGAAGGGAATGAGCGTTATGAGG
 GCTACTGTGTTGACTTAGCTGCAGAAATGGCAAACATTGTGGATTCAAGTACAAGCTGACTATTGTTGG
 GGATGGCAAGTATGGGGCCAGGGATGCAGACACCAAAATTTGGAATGGTATGGTTGGAGAACTTGTATAT
 GGGAAAGCTGATATTGCCATTGCTCCATTAATCACTCTCGTGAGAGAAGAGGTGATTGACTTCTCGA
 AGCCATTCATGAGCCTTGAATCTCTATCATGATCAAGAAGCCTCAGAAGTCAAACCAGGAGTGTTC
 CTTTCTTGATCCTTAGCCTATGAGATCTGGATGTGCATTGTGTTTGCCTACATTGGGGTCAGTGTAGTT
 TTATTCCTGGTCAGCAGATTTAGCCCTACGAGTGGCACACTGAGGAATTTGAAGATGGAAGAGAAACAC
 AAAGTAGTGAATCAACTAATGAATTTGGGATTTTTAATAGTCTCTGGTTTTCTTGGGTGCCTTTATGCG
 GCAAGGATGCGATATTTGCGCAAGATCTCTCTCTGGGCGCATTGTTGGAGGTGTGTGGTGGTTCTTTACC
 CTCATCATCATCTCCTCTACACGGCTAACTTAGCTGCCTTCTGACTGTAGAGAGGATGGTGTGCGCCA
 TCGAAAGTGTGAGGATCTGTCTAAGCAAACAGAAATGCTTATGGAACATTAGACTCTGGCTCCACTAA
 AGAGTTTTTCAGGAGATCTAAAATTGCAGTGTGATAAAATGTGGACTTATATGAGGAGTGCAGAGCCC
 TCTGTGTTGTGAGGACTACGGCAGAAGGAGTAGCCAGAGTCAGGAAATCCAAAGGGAAGTATGCCTACT
 TGCTGGAGTCCACAATGAATGAGTACATCGAGCAGAGGAAGCCTTGGCACACCATGAAAGTGGGCGCAA
 CCTGGATTCCAAAGGCTACGGCATCGCCACACCTAAAGGATCCTCATTAAGGTGGGTGGAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG227068 representing NM_001039195
Red=Cloning site Green=Tags(s)

MQKIMHISVLLSPVLWGLIFGVSSNSIQIGGLFPRGADQEYSAFRVGMVQFSTSEFRLTPHIDNLEVANS
 FAVTNAFCSQFSRGVYAIFGFYDKKSVNTITSFCGTLHVSFITPSFPTDGTTHPFVIQMRPDLKGALLSLI
 EYYQWDFAYLYDSDRGLSTLQAVLDSAAEKKWQVTAINVGNINNDKKDETYRSLFQDLELKKERRVILD
 CERDKVNDIVDQVITIGKHVKGYHYIIANLGFDTGDLKIQFGGANVSGFQIVDYDDSLVSKFIERWSTL
 EEKEYPGAHTATIKYTSALTYDAVQVMTEAFRNLRKQRIEISRRGNAGDCLANPAVPWGGQVEIERALKQ
 VQVEGLSGNIKFDQNGKRINYTIMELKTNGPRKIGYWSEVDKMMVVTLTLPSPGNDTSGLENKTVVVT
 ILESPYMMKKNHEMLEGNEREYEGYCVDLAAEIAKHCGFKYKLTIVGDGKYGARDADTKIWNMGVGLVY
 GKADIAIAPLTITLVREEVIDFSKPFMSLGISIMIKKPKQSKPGVFSFLDPLAYEIWMCIVFAYIGVSVV
 LFLVSRFSPYEWHTTEFEDGRETQSSESTNEFGIFNSLWFSLGAFMRQGCDSRSLSGRIVGGVWVFFFT
 LIISSYANLAAFLTVERMVSPIESAEDLSKQTEIAYGTLDGSGTKEFFRRSKIAVFDKMWTYMRSAEP
 SVFVRTTAEGVARVRKSKGKYAYLLESTMNEYIEQRKPCDTMKVGGNLDKGYGIATPKGSSLRWVE

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1830_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

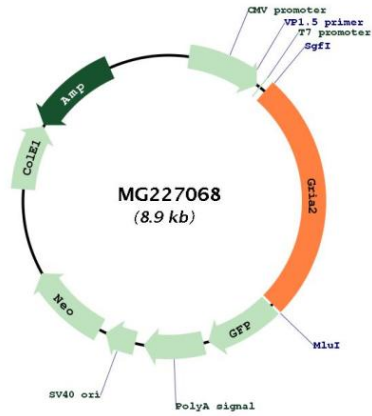


ACCN: NM_001039195

ORF Size: 2301 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
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_001039195.2
RefSeq Size:	3491 bp
RefSeq ORF:	2304 bp
Locus ID:	14800
Cytogenetics:	3 35.5 cM
Gene Summary:	<p>Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. This gene product belongs to a family of glutamate receptors that are sensitive to alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA), and function as ligand-activated cation channels. These channels are assembled from 4 related subunits, Gria1-4. The subunit encoded by this gene (Gria2) is subject to RNA editing (CAG->CGG; Q->R) within the second transmembrane domain, which is thought to render the channel impermeable to Ca(2+). Alternative splicing, resulting in transcript variants encoding different isoforms, (including the flip and flop isoforms that vary in their signal transduction properties), has been noted for this gene. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for MG227068