

## Product datasheet for **MG221619**

### Gria4 (NM\_001113181) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gria4 (NM_001113181) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gria4
Synonyms:	Glu; GluA4; Glur; Glur-4; GluR-D; Glur4; Gluralpha4; spk; spkw1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG221619 representing NM_001113181 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGATTATTTGCAGGCAGATTGCTTGTGTTTTCTGGATTTGGGGACTCGCCATGGGAGCCTTTC  
CGAGCAGCGTTCAAATAGGTGGTCTCTTTATCCGAAACACAGACCAGGAATACACTGCTTTTCGGCTAGC  
TATCTTTCTTCATAACACCAGCCCCAATGCATCTGAAGCCCTTCAATTTGGTACCTCATGTGGACAAC  
ATTGAGACTGCCAACAGTTTTGCTGTGACAAATGCATTCTGTTCCAGTATTCTAGAGGGGTGTTTGCCA  
TTTTTGGACTCTATGACAAGAGGTCAGTGCATACCTTGACCTCCTCTGCAGTGTCTGCACATCTCTCT  
CATCACACCAAGCTTCCCCTACTGAAGGAGAGGCCAGTTCGTGCTTCAGCTAAGACCTTCATTGAGAGGT  
GCACTCCTGAGCCTCCTGGATCACTATGAATGGAATTGTTTTGTCTTCTGTATGATACAGACAGGGGT  
ATCAATACTTCAAGCTATAATGGAAAAAGCAGGACAGAATGGATGGCATGTGAGTGCATATGTGTGGA  
AAATTTAACGATGTGAGTACAGGCAACTACTAGAAGAGCTTGACAGAAGACAAGAGAAGAAATTTGTA  
ATAGATTGTGAGATAGAAAGGCTTCAAACATATTAGAACAAATTTGTGAGTGTGGGAAGCACGTCAAAG  
GCTACCATTATATCATCGCAAATTTGGGTTTCAAAGATATTTCTCTTGAGAGATTATACATGGAGGAGC  
AAATGTCACTGGATTCCAGTTAGTAGATTTTAAACGCCCATGGTGACGAAACTAATGGATCGCTGGAAG  
AACTAGATCAACGAGAATATCCAGGATCTGAAACACCTCCAAAGTACACTTCTGCTCCTCACTTACGATG  
GTGCTTGGTAATGGCTGAAACTTTCCGAAGTCTCAGAAGACAGAAAATTGATATTTCAAGGAGAGGAAA  
TGCCGGGGATTGTCTGGCAAACCTGCTGCTCCCTGGGGCCAGGGAATTGACATGGAGAGAACAACACTGAAG  
CAGGTTCAATCAAGGACTGACTGGGAATGTTCAATTTGACCACTATGGACGTAGAGTTAATTACACAA  
TGGATGTGTTGAATTAAGACAGGACCTCGAAAGTTGGCTATTGGAACGATATGGATAAATTAGT  
CTTGATTCAAGATGCGCCTACTCTTGGCAATGACACAGCAGCTATCGAGAACAGAACAGTGGTTGTAACC  
ACAATTATGCCTCTGATGAAGAATCCTATTTTAAGAAAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG221619 representing NM\_001113181  
 Red=Cloning site Green=Tags(s)

MRIICRQIVLLFSGFWGLAMGAFSSVQIGGLFIRNTDQEYAFRLAIFLHNTSPNASEAPFNLVPHVDN  
 IETANSFAVTNAFCSQYSRGVFAIFGLYDKRSVHTLTSFCSALHISLITPSFPTEGESQFVLQLRPSLRG  
 ALLSLLDHYEWNCVFVLYDTRGYSILQAIMEKAGQNGWHVSAICVENFNDVSYRQLLEELDRRQEKKFV  
 IDCEIERLQNIIEQIVSVGKHKVGYHYIIANLGFKDISLERFIHGKANVTGFQLVDFNTMPVTKLMDRWK  
 KLDQREYPGSETPPKYTSALTYDGLVMAETFRSLRRQKIDISRRGNAGDCLANPAAPWQGQIDMERTLK  
 QVRIQGLTGNVQFDHYGRRVNYTMDVFELKSTGPRKVGWYNDMDKLVLIQDAPTLGNDTAAIENRTVVVT  
 TIMPLMKNPILRN

TRTRPLE – GFP Tag – V

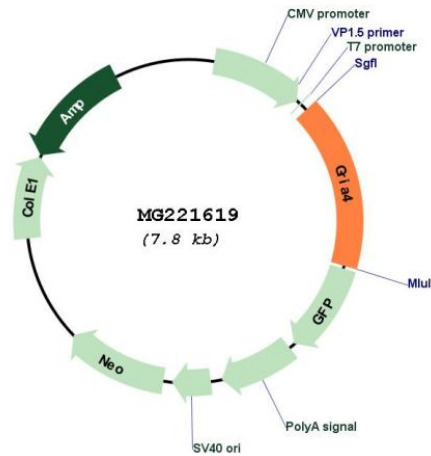
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_001113181

<b>ORF Size:</b>	1299 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_001113181.1</a> , <a href="#">NP_001106652.1</a>
<b>RefSeq Size:</b>	2338 bp
<b>RefSeq ORF:</b>	1302 bp
<b>Locus ID:</b>	14802
<b>UniProt ID:</b>	<a href="#">Q9Z2W8</a>
<b>Cytogenetics:</b>	9 2.46 cM
<b>Gene Summary:</b>	Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. These receptors are heteromeric protein complexes composed of multiple subunits, arranged to form ligand-gated ion channels. The classification of glutamate receptors is based on their activation by different pharmacologic agonists. The subunit encoded by this gene belongs to a family of AMPA (alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate)-sensitive glutamate receptors, and is subject to RNA editing (AGA->GGA; R->G). Alternative splicing of this gene results in transcript variants encoding different isoforms, which may vary in their signal transduction properties. [provided by RefSeq, Jul 2008]