

## Product datasheet for **MR221618**

### Gria4 (NM\_001113180) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gria4 (NM_001113180) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gria4
Synonyms:	Glu; GluA4; Glur; Glur-4; GluR-D; Glur4; Gluralpha4; spk; spkw1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR221618 representing NM\_001113180  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAGGATTATTTGCAGGCAGATTGTCTTGTGTTTTCTGGATTTGGGGACTCGCCATGGGAGCCTTTC  
 CGAGCAGCGTTCAAATAGGTGGTCTCTTTATCCGAAACACAGACCAGGAATACACTGCTTTTCGGCTAGC  
 TATCTTTCTTCATAACACCAGCCCAATGCATCTGAAGCCCTTTCAATTTGGTACCTCATGTGGACAAC  
 ATTGAGACTGCCAACAGTTTTGTGTGACAAATGCATTCTGTTCCAGTATTCTAGAGGGGTGTTTGCCA  
 TTTTGGACTCTATGACAAGAGGTCAGTGCATACCTTGACCTCCTTCTGCAGTGCCTGCACATCTCTCT  
 CATCACACCAAGCTTCCCCTGAAGGAGAGAGCCAGTTCGTGCTTCAGCTAAGACCTTCATTGAGAGGT  
 GCACTCCTGAGCCTCCTGGATCACTATGAATGGAATTGTTTTGTCTTCTGTATGATACAGACAGGGGT  
 ATCAATACTTCAAGCTATAATGAAAAAGCAGGACAGAATGGATGGCATGTCAGTGCATATGTGTGGA  
 AAATTTAACGATGTCAGCTACAGGCACTACTAGAAGAGCTTGACAGAAGACAAGAGAAGAAATTTGTA  
 ATAGATTGTGAGATAGAAAGGCTTCAAACATATTAGAACAATTTGTGAGTGTGGGAAGCACGTCAAAG  
 GCTACCATTATATCATCGCAAATTTGGGTTTCAAAGATATTTCTCTTGAGAGATTATACATGGAGGAGC  
 AAATGTCACTGGATTCCAGTTAGTAGATTTAATACGCCCATGGTACGAAACTAATGGATCGTGGAAG  
 AAAGTAGATCAACGAGAAATCCAGGATCTGAAACACCTCAAAGTACACTTCTGCTCTCACTTACGATG  
 GTGTCTTGGTAATGGCTGAAACTTTCCGAAGTCTCAGAAGACAGAAAATTGATATTTCAAGGAGAGGAAA  
 TGCCGGGATGTCTGGCAAACCTGCTGCTCCCTGGGCCAGGGAAATGACATGGAGAGAACACTGAAG  
 CAGGTTCAAGTCAAGGACTGACTGGGAATGTTCAATTTGACCACTATGGACGTAGAGTTAATTACAAA  
 TGGATGTGTTGAATAAAAAGCACAGGACCTCGAAAGTTGGCTATTGGAACGATATGGATAAATAGT  
 CTTGATCAAGATGCGCCTACTCTTGGCAATGACACAGCAGCTATCGAGAACAGAACAGTGGTTGTAACC  
 ACAATTATGGAATCCCTTACGTTATGTACAAGAAAAATCATGAAATGTTTGAAGGAAATGACAAGTATG  
 AAGGCTACTGTAGACTTGGCATCTGAAATGCGAAACATATCGGTATCAAATATAAAATGCCATTGT  
 CCCTGATGGAAAATATGGAGCAAGGATGCGGACACCAAATTTGGAATGGGATGGTAGGAGAGCTGTG  
 TATGGGAAAGCAGAGATTGCCATTGCACCTCTGACAATCACGTTGGTGGAGAGGAGGTCATCGACTTTT  
 CTAAGCCTTTTATGAGTTTAGGCATCTCTATCATGATCAAAAAACCTCAGAAATCAAACCAGGAGTGT  
 TTCCTTCTTGACCCTCTGGCCTATGAGATCTGGATGTGCATAGTGTTCATACATTGGTGTGAGCGT  
 GTCTTGTCTTAGTCAAGTTTAGCCATATGAGTGGCACACAGAAGGCCTGAGGATGGAAAAGAAG  
 GACCCAGTGACCAACCTCCAATGAGTTTGGCATCTTAAACAGCCTCTGGTTTTCCCTGGGTGCCTTTAT  
 GCAACAAGGATGTGACATTTACCCAGATCCCTGTCCGGTCCGATTGTTGGAGGCGTATGGTGGTCTTC  
 ACTCTCATCATTATCTACCTACACTGCTAATCTGGCTGCATTCTGACAGTGGAGAGAATGGTCTCCC  
 CCATAGAAAGTGCAAGACCTGGCCAAACAAACAGAAATGGCTATGGAACACTTGATTCGGGATCAAC  
 AAAAGAATTTCTCAGAAGATCAAAAATAGCAGTATATGAAAAGATGTGGACCTACATGCGATCGGCAGAG  
 CCATCTGTGTTCACTAGAACTACAGCTGAGGGCGTGGCCCGTGTCCGCAAGTCCAAGGGCAAATTTGCCT  
 TCCTCTGGAGTCCAGATGAATGAATACATTGAGCAGCGAAAGCCCTGTGACACGATGAAAGTGGGAGG  
 AAACCTGGATTTCAAAGGCTATGGTGTAGCGACGCCCAAGGTTCTCATTAGGAAATGCTGTTAACCTC  
 GCAGTTTTAAAAGTGAATGAACAAGGCCTCTTGGACAAAATGAAAAACAATGGTGGTACGACAAAGGAG  
 AATGTGGCAGCGGGGAGGTGACTCCAAGGACAAGACGAGTGCCTTGAGCCTGAGCAACGTAGCAGGCGT  
 CTTCTACATTCTGGTTGGCGCTTGGGCTTGGCAATGCTGGTGGCTTTGATAGAGTTCTGTTACAAGTCC  
 AGGGCAGAGGCGAAGAGAATGAAGCTGACTTTTTCCGAAGCCATAAGAAACAAAGCCAGGTTATCCATCA  
 CTGGGAGTGTGGGAGAAAACGGCCGTGTGCTGACCCCGACTGCCCAAGGCGTACACACAGGAACTGC  
 GATTAGACAGAGCTCGGGATTGGCTGTCATTGCATCGGACCTACCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR221618 representing NM\_001113180  
 Red=Cloning site Green=Tags(s)

MRIICRQIVLLFSGFWGLAMGAFSSVQIGGLFIRNTDQEYAFRLAIFLHNTSPNASEAPFNLVPHVDN  
 IETANSFAVTNAFCSQYSRGVFAIFGLYDKRSVHTLTSFCSALHISLITPSFPTEGESQFVLQLRPSLRG  
 ALLSLLDHYEWNCVFVLYDTRGYSILQAIMEKAGQNGWHVSAICVENFNDVSYRQLLEELDRRQEKKFV  
 IDCEIERLQNIIEQIVSVGKHKVGYHYIIANLGFKDISLERFIHGKANVTGFQLVDFNTPMVTKLMDRWK  
 KLDQREYPGSETPPKYTSALTYDGLVMAETFRLRQKIDISRRGNAGDCLANPAAPWQGGIDMERTLK  
 QVRIQGLTGNVQFDHYGRRVNYTMDVFEKSTGPRKVGWYNDMDKLVLIQDAPTLGNDTAAIENRTVVVT  
 TIMESPYVMKKNHEMFEGNDKYEYCYVDLASEIAKHIGIKYKIAIVPDGKYGARDADTKIWNMGVGLV  
 YGKAEIAIAPLTITLVREEVIDFSKPFMSLGISIMIKKPKQSKPGVFSFLDPLAYEIWMCIVFAYIGVSV  
 VLFLVSRFSPYEWHTTEEPEDGKEGSDQPPNEFGIFNSLWFLGAFMQQGCISPRSLSGRIVGGVWVWF  
 TLIIISSYANLAAFLTVERMVSPIESAEDLAKQTEIAYGTLDSGSTKEFFRRSKIAVYEKMWTYMRSAE  
 PSVFTRTTAEGVARVRKSKGKFAFLLESTMNEYIEQRKPCDTMKVGGNLDKSGYGVATPKGSSLGNVNL  
 AVLKLNQGLLDKLNKWWYDKGEGSGGGDSKDKTSALSLSNVAGVFYILVGGGLAMLVALIEFCYKS  
 RAEAKRMKLTfSEAIRNKARLSITGsvGENRVLTPDCPKAVHTGTAIRQSSGLAVIASDLP

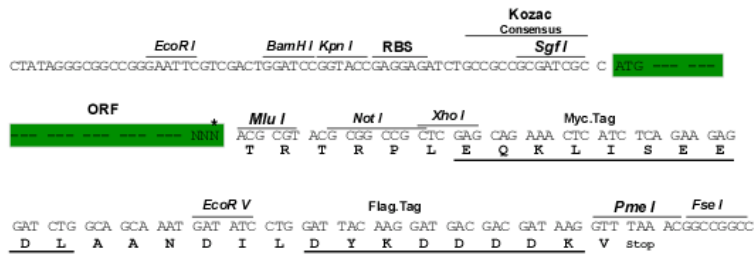
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9003\\_c10.zip](https://cdn.origene.com/chromatograms/mm9003_c10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:

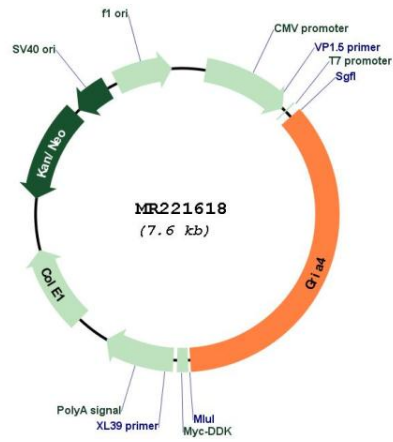


\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001113180

<b>ORF Size:</b>	2706 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_001113180.1</a> , <a href="#">NP_001106651.1</a>
<b>RefSeq Size:</b>	5458 bp
<b>RefSeq ORF:</b>	2709 bp
<b>Locus ID:</b>	14802
<b>UniProt ID:</b>	<a href="#">Q9Z2W8</a>
<b>Cytogenetics:</b>	9 2.46 cM
<b>MW:</b>	101.2 kDa
<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]

Product images:



Circular map for MR221618