

## Product datasheet for **MR211114**

### Gria4 (NM\_019691) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gria4 (NM_019691) 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)



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ORF Nucleotide  
Sequence:

>MR211114 representing NM\_019691  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGAGGATTATTTGCAGGCAGATTGTCTTGTGTTTTCTGGATTTGGGGACTCGCCATGGGAGCCTTTC  
CGAGCAGCGTTCAAATAGGTGGTCTCTTTATCCGAAACACAGACCAGGAATACACTGCTTTTCGGCTAGC  
TATCTTTCTTCATAACACCAGCCCAATGCATCTGAAGCCCTTTCAATTTGGTACCTCATGTGGACAAC  
ATTGAGACTGCCAACAGTTTTGTGTGACAAATGCATTCTGTTCCAGTATTCTAGAGGGGTGTTTGCCA  
TTTTTGGACTCTATGACAAGAGGTCAGTGCATACCTTGACCTCCTTCTGCAGTGCCTGCACATCTCTCT  
CATCACACCAAGCTTCCCCTGAAGGAGAGAGCCAGTTCGTGCTTCAGCTAAGACCTTCATTGAGAGGT  
GCACTCCTGAGCCTCCTGGATCACTATGAATGGAATTGTTTTGTCTTCTGTATGATACAGACAGGGGT  
ATTCAACTACTCAAGCTATAATGAAAAAGCAGGACAGAATGGATGGCATGTCAGTGCATATGTGTGGA  
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ATAGATTGTGAGATAGAAAGGCTTCAAACATATTAGAACAATTTGTGAGTGTGGGAAGCACGTCAAAG  
GCTACCATTATATCATCGCAAATTTGGGTTTCAAAGATATTTCTCTTGAGAGATTTATACATGGAGGAGC  
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AACTAGATCAACGAGAAATCCAGGATCTGAAACACCTCCAAAGTACACTTCTGCTCTCACTTACGATG  
GTGTCTTGGTAATGGCTGAAACTTCCGAAGTCTCAGAAGACAGAAAATTGATATTTCAAGGAGAGGAAA  
TGCCGGGATGTCTGGCAAACCTGCTGCTCCCTGGGCCAGGGAAATGACATGGAGAGAACACTGAAG  
CAGGTTCAAGTCAAGGACTGACTGGGAATGTTCAATTTGACCACTATGGACGTAGAGTTAATTACAAA  
TGGATGTGTTGAATAAAAAGCACAGGACCTCGAAAGTTGGCTATTGGAACGATATGGATAAATTAGT  
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CCCTGATGGAAAATATGGAGCAAGGATGCGGACACCAAATTTGGAATGGGATGGTAGGAGAGCTGTG  
TATGGGAAAGCAGAGATTGCCATTGCACCTCTGACAATCACGTTGGTGGCAGAGGAGGTATCGACTTTT  
CTAAGCCTTTTATGAGTTTAGGCATCTCTATCATGATCAAAAAACCTCAGAAATCAAACCAGGAGTGT  
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GTCTTGTCTTAGTCAAGTTTAGCCATATGAGTGGCACACAGAAGGCCTGAGGATGGAAAAGAAG  
GACCCAGTGACCAACCTCCAATGAGTTTGGCATCTTTAACAGCCTCTGGTTTTCCCTGGGTGCCTTTAT  
GCAACAAGGATGTGACATTTACCCAGATCCCTGTCCGGTCCGATTGTTGGAGGCGTATGGTGGTCTTC  
ACTCTCATCATTATCTACCTACACTGCTAATCTGGCTGCATTCTGACAGTGGAGAGAATGGTCTCCC  
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AAAAGAATTCTTCAGAAGATCAAAAATAGCAGTATATGAAAAGATGTGGACCTACATGCGATCGGCAGAG  
CCATCTGTGTTCACTAGAACTACAGCTGAGGGCGTGGCCCGTGTCCGCAAGTCCAAGGGCAAATTTGCCT  
TCCTCTGGAGTCCAGATGAATGAATACATTGAGCAGCGAAAGCCCTGTGACACGATGAAAGTGGGAGG  
AAACCTGGATTTCAAAGGCTATGGTGTAGCGACGCCCAAGGGTTCCTCATTAGGAACTCCTGTAACCTT  
GCCGTTTTGAAACTCAGTGAGGCAGGCGTCTTAGACAAGCTGAAAAACAATGGTGGTACGATAAAGGTG  
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CTTCTACATTCTGGTTGGCGCTTGGGCTTGGCAATGCTGGTGGCTTTGATAGAGTTCTGTTACAAGTCC  
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CTGGGAGTGTGGGAGAAAACGGCCGTGTGCTGACCCCGACTGCCCAAGGCGTACACACAGGAACTGC  
GATTAGACAGAGCTCGGGATTGGCTGTCATTGCATCGGACCTACCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR211114 representing NM\_019691  
 Red=Cloning site Green=Tags(s)

MRIICRQIVLLFSGFWGLAMGAFSSVQIGGLFIRNTDQEYAFRLAIFLHNTSPNASEAPFNLVPHVDN  
 IETANSFAVTNAFCSQYSRGVFAIFGLYDKRSVHTLTSFCSALHISLITPSFPTEGESQFVLQLRPSLRG  
 ALLSLLDHYEWNCVFVLYDTRGYSILQAIMEKAGQNGWHVSAICVENFNDVSYRQLLEELDRRQEKKFV  
 IDCEIERLQNILEQIVSVGKHKVGYHYIIANLGFKDISLERFIHGKANVTGFQLVDFNTPMVTKLMDRWK  
 KLDQREYPGSETPPKYTSALTYDGLVMAETFRLRQKIDISRRGNAGDCLANPAAPWQGGIDMERTLK  
 QVRIQGLTGNVQFDHYGRRVNYTMDVFEKSTGPRKVGWYNDMDKLVLIQDAPTLGNDTAAIENRTVVVT  
 TIMESPYVMKKNHEMFEGNDKYEYCYVDLASEIAKHIGIKYKIAIVPDGKYGARDADTKIWNMGVDELV  
 YGKAEIAIAPLTITLVREEVIDFSKPFMSLGISIMIKKPKQSKPGVFSFLDPLAYEIMWCIVFAYIGVSV  
 VLFLVSRFSPYEWHTTEEPEDGKEGSDQPPNEFGIFNSLWFLGAFMQQGCDSRSLSGRIVGGVWVWF  
 TLIIISSYANLAAFLTVERMVSPIESAEDLAKQTEIAYGTLDSGSTKEFFRRSKIAYVEKMWTYMRSAE  
 PSVFTRTTAEGVARVRKSKGKFAFLLESTMNEYIEQRKPCDTMKVGGNLDKSGYGVATPKGSSGLTPVNL  
 AVLKLVSEAGVLDKLNKWWYDKGEGPKDSGSKDKTSALSLSNVAGVFYILVGGGLAMLVALIEFCYKS  
 RAEAKRMKLTSEAIRNKARLSITGSGVGENRVLTPDCPKAVHTGTAIRQSSGLAVIASDLP

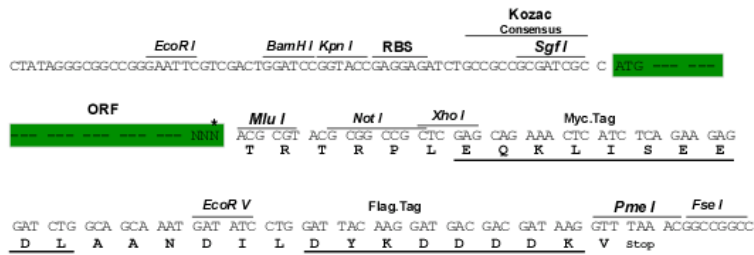
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9027\\_g11.zip](https://cdn.origene.com/chromatograms/mm9027_g11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:

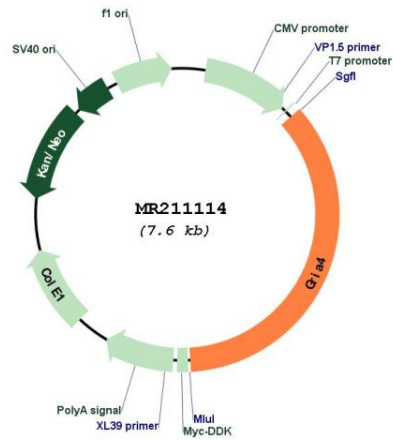


\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_019691

<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_019691.4</a> , <a href="#">NP_062665.3</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 MR211114