

## Product datasheet for **RR200372**

### Gria4 (NM\_001113185) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gria4 (NM_001113185) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gria4
Synonyms:	GluA4; GluR-D; GluR4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR200372 representing NM_001113185 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGAGGATTATTTGCAGGCAGATTGCTTGTGTTTTCTGGATTTGGGGACTCGCCATGGGAGCCTTTC  
CAAGCAGCGTTCAAATAGGTGGTCTCTTCATCCGAAACACAGACCAGGAATACACTGCTTTTAGACTGGC  
AATCTTTCTTCATAACACCAGCCCAATGCATCGGAAGCTCCTTCAATTTGGTACCTCATGTGGACAAC  
ATTGAGACTGCCAACAGTTTTGCTGTGACAAACGCCTTCTGTTCCAGTATTCTAGAGGGGTGTTTGCCA  
TTTTTGGACTCTATGACAAGAGATCCGTGCATACCTTGACCTCGTTCTGCAGTGCTCTGCACATCTCTCT  
CATCACACCAAGCTTTCCCACTGAAGGGGAGAGCCAGTTTGTGCTGCAGCTAAGACCTTCACTGAGAGGT  
GCACTCCTGAGCCTCCTGGATCACTATGAGTGGAACTGTTTCGTCTTCTGTATGATACAGACAGGGGT  
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GCTACCATATATCATCGCAAATTTGGGTTTCAAGGATATTTCTCTTGAGAGATTATACATGGAGGAGC  
AAATGTAACAGGATTCAGTTGGTAGATTTAATACACCCATGGTAACCAAATAATGGATCGGTGGAAAG  
AAACTAGATCAGAGAGAATATCCAGTTCTGAAACACCTCAAAGTACACCTCTGCTCTCACTTATGATG  
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TGCTGGGACTGTCTGGCAAACCCTGCTGCTCCCTGGGGCCAGGGAATTGACATGGAGAGGACACTGAAG  
CAGGTTCAATTCAGGGCTGACTGGGAATGTTCAATTTGACCATTATGGACGTAGAGTTAATTACACAA  
TGGATGTGTTGAACTGAAAAGCACAGGACCTCGAAAGGTTGGCTACTGGAATGATATGGATAAATTAGT  
CTTGATTCAAGATATGCCTACTCTTGCAATGACACAGCAGCTATTGAGAACAGAACAGTGGTTGAACC  
ACAATTATGCCTCTGATGAAGAATCCTATTTAAGAAAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR200372 representing NM\_001113185  
 Red=Cloning site Green=Tags(s)

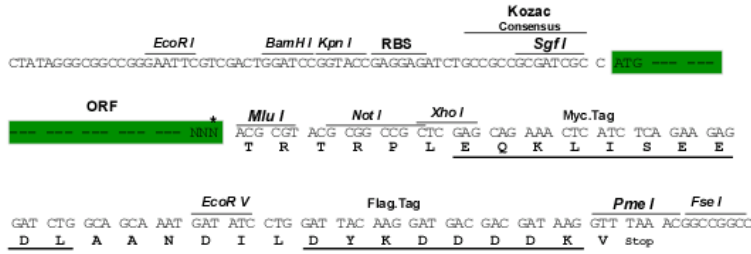
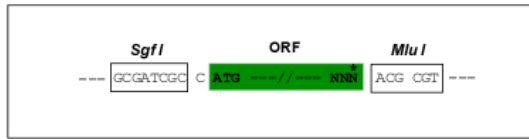
MRIICRQIVLLFSGFWGLAMGAFPSSVQIGGLFIRNTDQEYAFRLAIFLHNTSPNASEAPFNLVPHVDN  
 IETANSFAVTNAFCSQYSRGVFAIFGLYDKRSVHTLTSFCSALHISLITPSFPTEGESQFVLQLRPSLRG  
 ALLSLLDHYEWNCVFVLYDTRGYSILQAIMEKAGQNGWHVSAICVENFNVDVSYRQLLEELDRRQEKKFV  
 IDCEIERLQNIILEQIVSVGKHVKGYHYIIANLGFKDISLERFIHGNAVTFGQLVDFNTPMVTKLMDRWK  
 KLDQREYPGSETPPKYTSALTVDGVLVMAETFRSLRQRKIDISRRGNAGDCLANPAAPWQGQIDMERTLK  
 QVRIQGLTGNVQFDHYGRRVNYTMDVFELKSTGPRKVGWYNDMDKLVLIQDMPRTLGNDAAIENRTVVVT  
 TIMPLMKNPILRN

TRTRP**LEQKLISEEDLA**NDILDYKDDDDK**V**

**Restriction Sites:**  
**Cloning Scheme:**

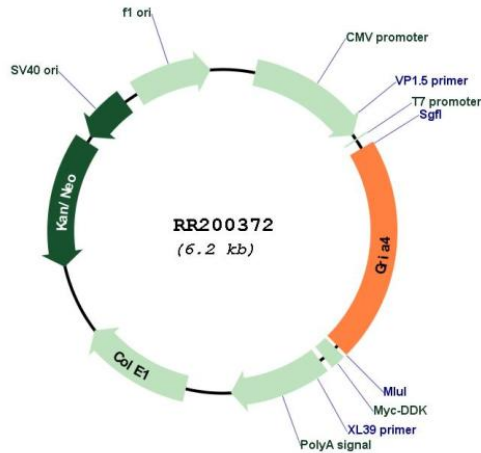
SgfI-MluI

Cloning sites used for ORF Shuttling:



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

**Plasmid Map:**



**ACCN:** NM\_001113185

<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_001113185.1</a> , <a href="#">NP_001106656.1</a>
<b>RefSeq Size:</b>	2966 bp
<b>RefSeq ORF:</b>	1302 bp
<b>Locus ID:</b>	29629
<b>Cytogenetics:</b>	8q11
<b>MW:</b>	49.2 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]