

## Product datasheet for **RR200373**

### Gria3 (NM\_032990) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gria3 (NM_032990) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gria3
Synonyms:	GluA3; GluR-3; GluR-C; GluR-K3; GLUR3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RR200373 representing NM\_032990  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGGGCAAAGCGTGTCTCCGGGCGGTCTTCTTTTTAGTCTGGGGCTTTTGGGTCAATCTCACGGAGGAT  
 TCCCAACACCATTAGCATAGGTGGACTTTTCATGAGAAACACGGTTCAGGAGCACAGCGCTTCCGCTT  
 TGCTGTGCAGTTATACAACCAACCAAGAACCACTGAGAAGCCCTCCATTTGAATTACCACGTAGAC  
 CACTTGGATTCTCCAATAGTTTTCTGTGACTAATGCTTTCTGCTCCAGTTCTCCAGAGGGGTATG  
 CTATCTTTGGATTCTATGACCAGATGTCAATGAACACCCTGACCTCCTTCTGTGGGGCCCTGCACACATC  
 TTTTGTACACCTAGCTTTCCCACTGATGCAGATGTGCAGTTTGTCCATCCAGATGCGCCAGCCTTGAAG  
 GGTGCCATTCTGAGTCTTCTCGTTACTACAAGTGGGAGAAGTTGTGTACCTCTATGACACAGAACGAG  
 GGTCTTCTGTCTACAAGCAATTATGGAGGCAGCAGTGCAAAACAACCTGGCAAGTGACAGCAAGGTCTGT  
 GGGAAACATAAAGGACGTCCAGGAATTCAGACGCATCATTGAAGAAATGGACAGAAGGCAGGAAAAACGA  
 TACTTGATTGACTGTGAAGTCGAAAGGATTAACACAATTTTGAACAGGTTGTGATCCTGGGGAAGCATT  
 CAAGAGGCTATCACTACATGCTTGTAACTGGGTTTTACTGACATTTTACTGGAAGAGTCATGCATGG  
 GGGAGCCAACATTACAGGTTTCCAGATTGTCAACAATGAAAACCAATGGTTTCAGCAGTTCATACAGCGC  
 TGGGTGAGACTGGATGAAAGGGAATTCCTGAAGCCAAGAATGCACCACTGAAGTATACATCTGCGCTGA  
 CACATGACGCAATATTGGTCATAGCAGAAGCCTCCGATACCTGAGGAGACAGAGAGTGGATGTCTCCCG  
 CAGAGGCAGTGTGGAGACTGCTTAGCAAACTCTGCTGTGCCCTGGAGTCAAGGAATTGATATTGAGAGA  
 GCTCTGAAAATGGTGAAGTACAAGGAATGACTGGAAACATCCAATTTGACACTTATGGAGTGGACAA  
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 GTGACTACCATTCTGGAATCACCATATGTGATGTATAAAAAGAATCATGAGCAGCTGGAAGGAAATGAGC  
 GCTATGAAGGCTACTGTGTTGATTTAGCCTATGAAATAGCCAAACACGTAAGGATCAAATACAAATTGTC  
 CATTGTGCGGTGATGGGAAATATGGCGCCAGAGATCCAGAGACTAAAATATGGAATGGCATGGTTGGGGAA  
 CTTGTCTATGGAAGAGCTGATATAGCTGTTGCTCCACTACTATAACATTGGTCCGTGAAGAAGTCATAG  
 ATTTCTCAAAGCCATTTATGAGCCTGGGAATCTCCATCATGATAAAGAAGCCTCAGAAATCAAAGCCAGG  
 CGTCTTTTATTCTGGATCCTTTGGCTTATGAAATCTGGATGTGCATTGTCTTCGCTTACATTGGAGTC  
 AGTGTAGTTCTTCTCCTAGTCAGCAGATTTAGCCCTTATGAATGGCACTTGAAGACAACATGAAGAAC  
 CTGCTGACCCACAAAGCCCTCCTGATCCTCCCAATGAATTTGGAATATTTAACAGTCTTTGGTTTTCTT  
 GGGTGCTTTCATGCAGCAAGGATGTGATATTTCTCCAAGATCACTTTCTGGGCGCATTGTTGGAGGGTT  
 TGGTGGTCTTACCCTGATCATAATCTCTTCTACACTGCAAACCTTGCTGCTTTCCTGACTGTGGAGA  
 GGATGGTGTCCCTATAGAGAGCGCTGAAGACTTAGCCAAGCAGACTGAAATTGCATATGGGACCCTGGA  
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 AAATCCGCAGAGCCATCTGTGTTTACAAAACAACAGCTGACGGGTAGCCCGAGTTCGGAAGTCCAAGG  
 GAAAGTTGCCTTCTGCTGGAGTCGACCATGAACGAGTACATTGAGCAGAGAAAGCCGTGCGATACGAT  
 GAAAGTTGGTGGAAATCTGGATTCCAAAGGCTATGGTGTGGCAACCCCTAAAGGCTCAGCATTAGGAACG  
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 ACGATAAGGGGAATGTGGAGCCAAGGACTCCGGGAGTAAGGACAAGACCAGTGTCTAAGCCTGAGCAA  
 TGTGGCAGGCGTGTCTATATACTTGTGCGAGGTCTGGGCTGGCCATGATGGTGGCTTTGATAGAATTC  
 TGTTACAAATCACGGGCAGAGTCCAAACGCATGAAACTCACAAGAACACCCAAAACCTTTAAGCCTGCTC  
 CTGCCACCAACTCAGAATTACGCTACATACAGAGAAGGCTACAACGTGTATGGAACAGAAAGTGTAA  
 GATC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR200373 representing NM\_032990  
 Red=Cloning site Green=Tags(s)

MGQSVLRAVFFLVLLGSHHGFPNTISIGGLFMRNTVQEHSFRFAVQLYNTNQNTTEKPFHLNYHVD  
 HLDSSNSFSVTNAFCSQFSRGVYAIFFGYDQMSMNTLSFCGALHTSFVTPSFPTDADVQFVIQMRPALK  
 GAILSLGYYKWEKFVYLYDTERGFSVLQAI MEAAVQNNWQVTARVGNIKDVQEFRRRIEEMDRRQEKR  
 YLIDCEVERINTILEQVVILGKHSRGYHYMLANLGF TDILLERVMHGGANITGFQIVNNENPMVQQFIQR  
 WVRLDEREFPEAKNAPLKYTSAL THDAILVIAEAFRYLRRQRVDVSRSGSAGDCLANPAVPWSQGIDIER  
 ALKMVQVQGMTGNIQFDTYGRRTNYTIDVYEMKVSGRKAGYWNEYERFVPFSDQQISNDSSSENRTIV  
 VTTILESPYVMYKKNHEQLEGNERYEGYCVDLAYEIAKHVRIKYKLSIVGDGKYGARDPETKIWNMGVGE  
 LYYGRADI AVAPLTITLVREEVIDFSKPFMSLGISIMIKKPKQSKPGVFSFLDPLAYEIWMCIVFAYIGV  
 SVVLFVSRFSPYEWHL EDNNEEPRDPQSPDPNFEFGIFNSLWFSLGAFMQGCDISPRSLSGRIVGGV  
 WWFFTLIISSYTANLA AFLTVERMVSPIESAEDLAKQTEIAYGTLDSGSTKEFFRRSKI AVYEKMWSYM  
 KSAEPSVFTKTTADGVARVRKSKGKFAFLLESTMNEYIEQRKPCDTMKVGGNLD SKGYGVATPKGSALGT  
 PVNLAVLKLSEQILDKLNKWWYDKGECGAKDSGSKDTSALSLSNVAGVFYILVGGLGLAMMVALIEF  
 CYKSRAESKRMKLT KNTQNFKPAPATNTQNYATYREGYNYVYGTESVKI

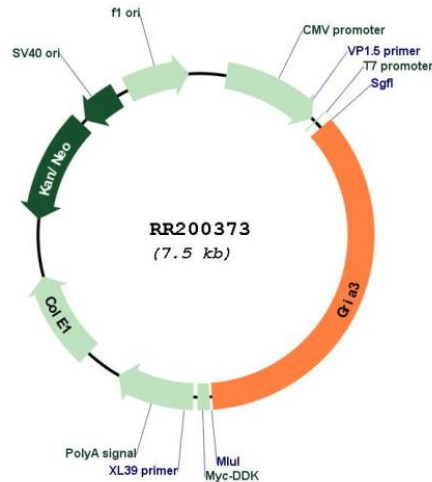
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_032990

**ORF Size:** 2664 bp

**OTI Disclaimer:** 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](#)

**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:**

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\\_032990.2](#), [NP\\_116785.2](#)

**RefSeq Size:** 5052 bp

**RefSeq ORF:** 2667 bp

**Locus ID:** 29628

**UniProt ID:** [P19492](#)

**Cytogenetics:** Xq35

**MW:** 100.4 kDa

**Gene Summary:** 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 at this locus results in different isoforms, which may vary in their signal transduction properties. [provided by RefSeq, Jul 2008]