

## Product datasheet for **MR231321**

### **Gria3 (NM\_001290451) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gria3 (NM_001290451) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gria3
Synonyms:	2900064I19Rik; Glu; GluA3; Glur; Glur-3; GluR-C; GluR-K3; Glur3; Gluralpha3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide  
Sequence:

>MR231321 representing NM\_001290451  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGGGCAAAGCGTGTCTCCGGGCGGTCTTCTTTTTAGTCTGGGGCTTTTGGGTCACTCTCACGGAGGAT  
TCCCAAACACCATTAGCATAGGTGGACTTTTCATGAGAAAACACGGTACAGGAGCACAGTGTCTTCCGCTT  
TGCTGTGCAGTTATACAACCAACCAAGAACCACTGAGAAGCCCTTCATTTGAACTACCACGTAGAC  
CACTTGGATTCTCCAATAGTTTTCTGTGACTAATGCTTTCTGCTCCAGTTCTCCAGAGGGGTATG  
CTATCTTTGGATTCTATGACCAGATGTCAATGAACACACTGACCTCCTTCTGTGGGGCCCTGCATACATC  
TTTCGTACACCTAGCTTTCCCACTGATGCCGATGTGCAGTTTGTTCATCCAGATGCGCCAGCCTTAAAG  
GGTGCCATTCTGAGTCTTCTGGTTACTACAAGTGGGAGAAGTTGTGTACCTCTATGACACAGAACGAG  
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CAAGAGGTTATCACTACATGCTTGTAACTGGGTTTTACTGACATTGTACTGGAAGAGTCATGCATGG  
GGGAGCCAACATTACAGGTTTCCAGATTGTCAACAATGAAAACCAATGGTCCAGCAATTCATACAGCGC  
TGGGTGAGACTGGATGAAAGGGAATTCCTGAAGCCAAGAATGCACCACTAAAGTATACATCTGCACTGA  
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CAGAGGCAGTGTGGAGACTGCTTAGCAAACTCTGCTGTGCCCTGGAGTCAAGGAATTGATATTGAGAGA  
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CATTGTGCGGTGATGGGAAATATGGCGCAAGGGATCCAGAGACTAAAATATGGAATGGCATGGTTGGGGAA  
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CTCGTGACCCACAAAGCCCTCCTGATCCTCCCAATGAATTTGGAATATTTAACAGTCTTTGGTTTTCTT  
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GATC

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ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR231321 representing NM\_001290451  
 Red=Cloning site Green=Tags(s)

MGQSVLRAVFFLVLLGSHSHGGFPNTISIGGLFMRNTVQEHSFRFAVQLYNTNQNTTEKPFHLNYHVD  
 HLDSSNSFSVTNAFCSSQFSRGVYAIFFGYDQMSMNTLSFCGALHTSFVTPSFPTDADVQFVIQMRPALK  
 GAILSLGYYKWEKFVYLYDTERGFSILQAI MEAAVQNNWQVTARVGNIKDIQEFRRRIEEMDRRQEKR  
 YLIDCEVERINTILEQVVILGKHSRGYHYMLANLGFDTIVLERVMHGGANITGFQIVNNENPMVQQFIQR  
 WVRLDEREFPEAKNAPLKYTSALTHDAILVIAEAFRYLRRQRVDVSRRGSAGDCLANPAVPWSQGIDIER  
 ALKMOVQVQGMTGNIQFDYGRRTNYTIDVYEMKVSGRKAGYWNEYERFVPSDQQISNDSSSENRTIV  
 VTTILESPYVMYKKNHEQLEGNERYEGYCVDLAYEIAKHVRIKYKLSIVGDGKYGARDPETKIWNMGVGE  
 LYYGRADI AVAPLTITLVREEVIDFSKPFMSLGISIMIKKPKQSKPGVFSFLDPLAYEIWMCIVFAYIGV  
 SVVLFVLSRFSPEYWHLEDNNEEPRDPQSPDPNEFGIFNSLWFSLGAFMQGCDISPRSLSGRIVGGV  
 WWFFTLIISSYTANLAAFLTVERMVSPIESAEDLAKQTEIAYGTLDSGSTKEFFRRSKI AVYEKMWSYM  
 KSAEPSVFTKTTADGVARVRKSKGKFAFLLESTMNEYIEQRKPCDTMKVGGNLD SKGYGVATPKGSALGN  
 AVNLAVLKLNEQGLLDKLNKWWYDKGECGSGGGDSKDKTSALSLSNVAGVFYILVGGLGLAMMVALIEF  
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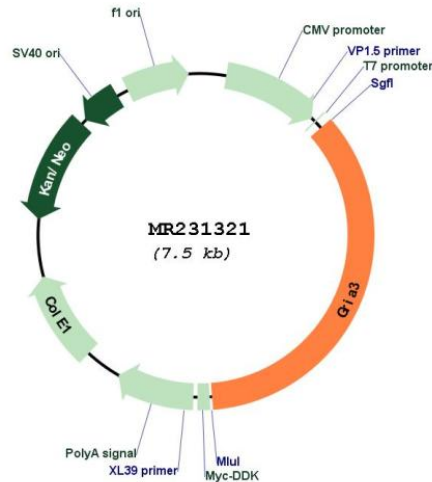
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_001290451

**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\\_001290451.2](#)

**RefSeq Size:** 2705 bp

**RefSeq ORF:** 2667 bp

**Locus ID:** 53623

**Cytogenetics:** X 23.19 cM

**MW:** 100.8 kDa

**Gene Summary:**

This gene encodes a multi-pass transmembrane protein that forms a homotetramer or heterotetramer in neuronal cells. The encoded protein is a ligand-gated ion channel that responds to the neurotransmitter L-glutamate to promote synaptic transmission. Deficiency of this gene leads to behavioral phenotypes. The transcript is subject to RNA editing at codon 769 (AGA->GGA; R->G). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]