

Product datasheet for **RR200371**

Gria4 (NM_017263) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gria4 (NM_017263) 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



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ORF Nucleotide Sequence:

>RR200371 representing NM_017263
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGGATTATTTGCAGGCAGATTGTCTTGTGTTTTCTGGATTTGGGGACTCGCCATGGGAGCCTTTC
 CAAGCAGCGTTCAAATAGGTGGTCTCTTCATCCGAAACACAGACCAGGAATACACTGCTTTTAGACTGGC
 AATCTTTCTTCATAACACCAGCCCAATGCATCGGAAGCTCCTTTCAATTTGGTACCTCATGTGGACAAC
 ATTGAGACTGCCAACAGTTTTGTGTGACAAACGCCTTCTGTTCCAGTATTCTAGAGGGGTGTTTGCCA
 TTTTGGACTCTATGACAAGAGATCCGTGCATACCTTGACCTCGTTCTGCAGTGTCTGCACATCTCTCT
 CATCACACCAAGCTTTCCACTGAAGGGGAGAGCCAGTTGTGCTGCAGCTAAGACCTTCACTGAGAGGT
 GCACTCCTGAGCCTCTGGATCACTATGAGTGGAACTGTTTCGTCTTCTGTATGATACAGACAGGGGT
 ATCAATACTTCAAGCTATAATGAAAAAGCAGGACAAAATGGATGGCATGTCAGTGCAATATGTGTGGA
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 GCTACCATTATATCATCGCAAATTTGGGTTTCAAGGATATTTCTCTTGAGAGATTATACATGGAGGAGC
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 GACCCAGTGACAGCCTCCAATGAATTTGGCATCTTAAACAGCCTTTGGTTTTCCCTGGGTGCCTTTAT
 GCAACAAGGATGTGACATTTACCCAGATCCCTGTGAGGTCGGATTGTTGGAGGCGTGTGGTGGTCTTC
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 GCCGTTTTGAAACTCAGTGAGGCAGGCGTCTTAGACAAGCTGAAAAACAATGGTGGTACGATAAAGGTG
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 AATTAGACAAAGTTCGGGATTGGCTGTCATTGCATCGGACCTACCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR200371 representing NM_017263
 Red=Cloning site Green=Tags(s)

MRIICRQIVLLFSGFWGLAMGAFSSVQIGGLFIRNTDQEYAFRLAIFLHNTSPNASEAPFNLVPHVDN
 IETANSFAVTNAFCSQYSRGVFAIFGLYDKRSVHTLTSFCSALHISLITPSFPTEGESQFVLQLRPSLRG
 ALLSLLDHYEWNCVFVLYDTRGYSILQAIMEKAGQNGWHVSAICVENFNDVSYRQLLEELDRRQEKKFV
 IDCEIERLQNIIEQIVSVGKHKVGYHYIIANLGFKDISLERFIHGGANVTGFQLVDFNTMPVTKLMDRWK
 KLDQREYPGSETPPKYTSALTYDGLVMAETFRLRQKIDISRRGNAGDCLANPAAPWQGGIDMERTLK
 QVRIQGLTGNVQFDHYGRRVNYTMDVFLKSTGPRKVGWYNDMDKLVLIQDMPGLGNDTAAIENRTVVVT
 TIMESPYVMYKKNHEMFEGNDKYEYCVLASEIAKHIGIKYKIAIVPDGKYGARDADTKIWNMGVDELV
 YGKAEIAIAPLTITLVREEVIDFSKPFMSLGISIMIKKPKQSKPGVFSFLDPLAYEIMWCIVFAYIGVSV
 VLFVLSRFSPEWHTTEPEDGKEGSDQPPNEFGIFNSLWFLGAFMQQGCISPRSLSGRIVGGVWVWF
 TLIIISSYANLAAFLTVERMVSPIESAEDLAKQTEIAYGTLDSGSTKEFFRRSKIAVYEKMWTYMRSAE
 PSVFTRTTAEGVARVRKSKGKFAFLLESTMNEYIEQRKPCDTMKVGGNLDKSGYGVATPKGSSLRTPVNL
 AVLKLVSEAGVLDKLNKWWYDKGEGPKDSGSKDKTSALSLSNVAGVFYILVGGGLAMLVALIEFCYKS
 RAEAKRMKLTSEAIRNKARLSITGSGVGENRVLTPDCPKAVHTGTAIRQSSGLAVIASDLP

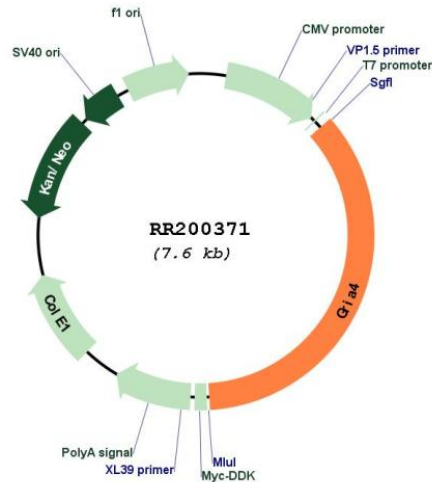
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_017263

ORF Size: 2706 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_017263.2](#), [NP_058959.2](#)

RefSeq Size: 4141 bp

RefSeq ORF: 2709 bp

Locus ID: 29629

UniProt ID: [P19493](#)

Cytogenetics: 8q11

MW: 100.9 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 of this gene results in transcript variants encoding different isoforms, which may vary in their signal transduction properties. [provided by RefSeq, Jul 2008]