

Product datasheet for **RC234917**

GRIA1 (NM_001258020) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRIA1 (NM_001258020) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GRIA1
Synonyms:	GluA1; GLUH1; GLUR1; GLURA; HBGR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC234917 representing NM_001258020
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTGACCTCCTTTTGTGGGGCCCTCCACGTCTGCTTCATTACGCCGAGCTTCCCGTTGATACATCCA
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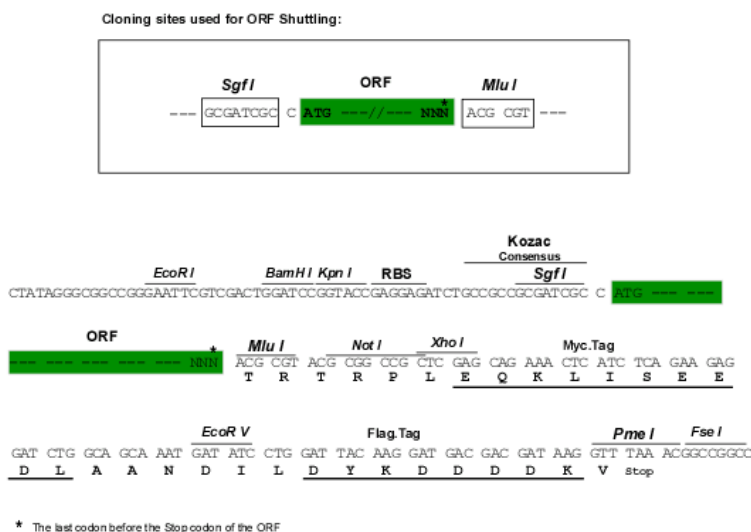
Protein Sequence: >RC234917 representing NM_001258020
 Red=Cloning site Green=Tags(s)

MLTSFCGALHVCFITPSFPVDTSNQFVLQLRPELQDALISIIDHYKWQKFVYIYDADRGLSVLQKVLDTA
 AEKNWQVTAVNILTTEEGYRMLFQDLEKKKERLVVVDCESERLNAILGQIIKLEKNGIGYHYILANLGF
 MDIDLNKFKESGANVTGFQLVNYTDTIPAKIMQQWKNSDARDHTRVDWKRPKYTSALTYDGVKVMAEAFQ
 SLRRQRIDISRRGNAGDCLANPAVPWGQGIDIQRALQQVRFEGLTGNVQFNEKGRRTNYTLHVIEMKHDG
 IRKIGYWNEDDKFVPAATDAQAGDNSSVQNRTYIVTTILEDPYVMLKKNANQFEGNDRYEGYCVLAAE
 IAKHVGYSYRLEIVSDGKYGARDPDTKAWNGMVGELVYGRADVAVAPLTITLVREEVIDFSKPFMSLGIS
 IMIKKPQKSKPGVFSFLDPLAYEIVMCIWFAYIGVSVVLFVSRFSPYEWHSSEFEEGRDQTTSDQSNEF
 GIFNSLWFSLGAFMQQGCDSRSLSGRIVGGVWFFTLIIISSYTANLAAFLTVERMVSPIESAEDLAK
 QTEIAYGTLEAGSTKEFFRRSKIAVFEKMWYMKSAEPSVVFRTTEEGMIRVRKSKGKYAYLLESTMNEY
 IEQRKPCDTMKVGGNLDKGYGIATPKGSALRGPVNLAVLKLSEQVLDKLSKWWYDKGECGSKDSGSK
 DKTSALSLSNVAGVFYILIGGLGLAMLVALIEFCYKSRSESKRMKGFCLIPQQSINEAIRTSTLPRNSGA
 GASSGGSGENGRVSHDFPKSMQSIPCMSHSSGMPLGATGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001258020

ORF Size: 2433 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_001258020.1](#), [NP_001244949.1](#)

RefSeq Size: 5804 bp

RefSeq ORF: 2436 bp

Locus ID: 2890

Cytogenetics: 5q33.2

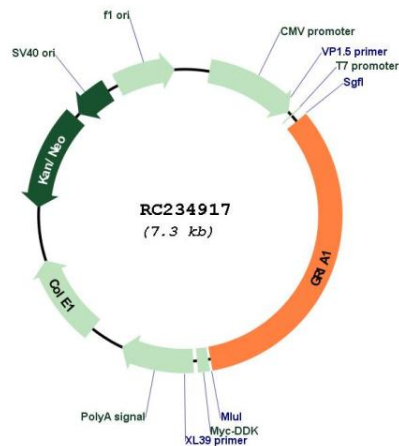
Protein Families: Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane

Protein Pathways: Amyotrophic lateral sclerosis (ALS), Long-term depression, Long-term potentiation, Neuroactive ligand-receptor interaction

MW: 91.2 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 with multiple subunits, each possessing transmembrane regions, and all arranged to form a ligand-gated ion channel. The classification of glutamate receptors is based on their activation by different pharmacologic agonists. This gene belongs to a family of alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate (AMPA) receptors. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC234917