

Product datasheet for **RG226253**

GRIA1 (NM_001114183) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRIA1 (NM_001114183) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRIA1
Synonyms:	GluA1; GLUH1; GLUR1; GLURA; HBGR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG226253 representing NM_001114183
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCAGCACATTTTTGCCTTCTTCTGCACCGGTTCTAGGCGCGGTAGTAGGTCCAATTTCCCAACA
 ATATCCAGATCGGGGATTATTTCCAAACCAGCAGTCACAGGAACATGCTGCTTTAGATTGCTTTGTC
 GCAACTCACAGAGCCCCGAAGCTGCTCCCCAGATTGATATTGTGAACATCAGCGACAGCTTTGAGATG
 ACCTATAGATTCTGTTCCAGTCTCCAAAGGAGTCTATGCCATCTTTGGGTTTTATGAACGTAGGACTG
 TCAACATGCTGACCTCTTTGTGGGGCCTCCACGTCTGCTCATTACGCCGAGCTTTCCCGTTGATAC
 ATCCAATCAGTTTGTCTTCAGCTGCGCCCTGAACTGCAGGATGCCCTCATCAGCATCATTGACCATTAC
 AAGTGGCAGAAATTTGTCTACATTTATGATGCCGACCGGGGCTTATCCGTCTGCAGAAAGTCTGGATA
 CAGCTGCTGAGAAGAACTGGCAGGTGACAGCAGTCAACATTTTGACAACCACAGAGGAGGGATACCGGAT
 GCTCTTTCAGGACCTGGAGAAGAAAAGGAGCGGCTGGTGGTGGTGGACTGTGAATCAGAACGCCTCAAT
 GCTATCTTGGGCCAGATTATAAAGCTAGAGAAGAAATGGCATCGGCTACCACTACATTCTTGCAAATCTGG
 GCTTCATGGACATTGACTTAAACAAATTCAAGGAGAGTGGCGCAATGTGACAGGTTTCCAGCTGGTGAA
 CTACACAGACACTATCCGGCCAAGATCATGCAGCAGTGGAGAATAGTGATGCTCGAGACCACACACGG
 GTGGACTGGAAGAGACCAAGTACACCTCTGCGCTCACCTACGATGGGGTGAAGGTGATGGCTGAGGCTT
 TCCAGAGCCTGCGGAGGCAGAGAATTGATATATCTCGCCGGGGAAATGCTGGGGATTGTCTGGCTAACCC
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 GGAAACGTGCAGTTTAAATGAGAAAGGACGCCGACCAACTACACGCTCCACGTGATTGAAATGAAACATG
 ACGGCATCCGAAAGATTGGTTACTGGAATGAAGATGATAAAGTTTGTCCCTGCAGCCACCGATCCCAAG
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 CAGAGATTGCCAAGCACGTGGGCTACTCTACCGTCTGGAGATTGTGAGTATGAAAAACGGAGCCCG
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 TCTCCATCATGATTAACCAACACAGAAATCCAAGCCGGGTGCTTCTCCTTCTGTATCCTTTGGCTTA
 TGAGATTTGGATGTGCATTGTTTTGCCTACATTTGGAGTGAAGTGTGCTCTTCTCTGTGACCGGCTTC
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 AGTTTGGGATATCAACAGTTTGTGTTTCTCCCTGGGAGCCTTATGCAGCAAGGATGTGACATTTCTCC
 CAGGTCCCTGTCTGGTCCGATCGTTGGTGGCGTCTGGTGGTTCTTACCTTAATCATCATCTCTCATAT
 ACAGCCAATCTGGCCGCCTTCTGACCGTGGAGAGGATGGTGTCTCCATTGAGAGTGCAGAGGACCTAG
 CGAAGCAGACAGAAATTCCTACGGGACGCTGGAAGCAGGATCTACTAAGGAGTTCTTCCAGGAGTCTAA
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 GCGCTCTTAGACAAGCTGAAAAGCAAATGGTGGTACGATAAAGGGGAATGTGGAAGCAAGGACTCCGGAA
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 GGTTTTTGTGATCCCACAGCAATCCATCAACGAAGCCATACGGACATCGACCTCCCCCGCAACACGG
 GGGCAGGAGCCAGCAGCGCGGCGAGTGGAGAGAATGGTCGGTGGTCAAGCATGACTTCCCCAAGTCCAT
 GCAATCGATTCTTGCATGAGCCACAGTTCAGGGATGCCCTTGGGAGCCACGGGATTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – **GTTTAA**

Protein Sequence: >RG226253 representing NM_001114183
 Red=Cloning site Green=Tags(s)

MQHIAFFCTGFLGAVVGANFPNNIQIGGLFPNQSQEHAARFALSQTTEPPKLLPQIDIVNISDSFEM
 TYRFCSQFSKGVYAIIFGFYERRTVNMLTSFCGALHVCFITPSFPVDTSNQFVQLRPELQDALISIIDHY
 KWQKFVYIYDADRGLSVLQKVLDTAAEKNWQVTAVNILTTTEEGYRMLFQDLEKKKERLVVVDCESE
 RLNAIILGQIIKLEKNGIGYHYILANLGFMDIDLNFKFKESGANVTGFQLVNYTDTIPAKIMQQWKN
 SDARDHTRVDWKRPKYTSALTYDGVKVMAEAFQSLRRQRIDISRRGNAGDCLANPAVPWGGQID
 IQRALQQVRFEGLTGNVQFNEKGRRTNYTLHVIEMKHDGIRKIGYWNEDDKFVPAATDAQAGDNSSV
 QNRTYIVTTILEDPYVMLKKNANQFEGNDRYEGYCVELAAEIAKHVGYSYRLEIVSDGKYGARDP
 DTKAWNGMVGELVYGRADVAVAPLTITLVREEVIDFSKPFMSLGISIMIKPKQKSKPGVFSFLD
 PLAYEIWMCIVFAYIGVSVVFLVSRFSPYEWHSSEFEGRDQTTSDQSNFEGIFNSLWFS
 LGAFMQGCDISPRSLSGRIVGGVWFFTLIISSYTANLAFLTVERMVSPIESAEDLAKQTEI
 AYGTLAEGSTKEFFRRSKIAVFEKMWTYMKSAEPSVFRVTT EEGMIRVRKSKGKYAYLLE
 STMNEYIEQRKPCDTMKVGGNLDKSGYGIATPKGSALRGPVNLAVLKLSEQGVL
 DKLKSKWYDKGECGSKDSGSKDKTSALSLSNVAGVFYILIGGLGLAMLVALIEFCYKSRSE
 SKRMKGFCLIPQQSINEAIRTSTLPRNSGAGASSGGSGENGRVVSDFPKSMQSI
 PCMSHSSGMPLGATGL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

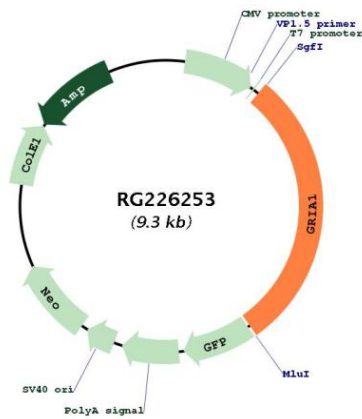
Cloning Scheme:



ACCN:	NM_001114183
ORF Size:	2718 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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_001114183.1 , NP_001107655.1
RefSeq Size:	5747 bp
RefSeq ORF:	2721 bp
Locus ID:	2890
UniProt ID:	P42261
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

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 RG226253