

Product datasheet for **RG235030**

GRIA1 (NM_001258021) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRIA1 (NM_001258021) 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:**

>RG235030 representing NM_001258021
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGCTGCAGTACCCATCTCTTTCAGCCTCTCCAGCTAGCTGGCGGCTTGGAGTGGCCATGGAGTAACT
 TGCTTTGTTTCTGACACCTGTTAAGCTACATCCTGAAGTGTGGGATTATTTCCAAACCAGCAGTCACA
 GGAACATGCTGCTTTTAGATTTGCTTTGTCGCAACTCACAGAGCCCCGAAGCTGCTCCCCAGATTGAT
 ATTGTGAACATCAGCGACAGCTTTGAGATGACCTATAGATTCTGTTCCAGTTCTCCAAAGGAGTCTATG
 CCATCTTTGGGTTTTATGAACGTAGGACTGTCAACATGCTGACCTCCTTTTGTGGGGCCCTCCACGCTCTG
 CTTCAATACGCCGAGCTTCCCGTTGATACATCCAATCAGTTTGTCTTCAGCTGCGCCCTGAACCTGCAG
 GATGCCCTCATCAGCATCATTGACCATTACAAGTGGCAGAAATTTGTCTACATTTATGATGCCGACCGGG
 GCTTATCCGTCTGCAGAAAGTCTGGATACAGCTGCTGAGAAGAACTGGCAGGTGACAGCAGTCAACAT
 TTTGACAACCACAGAGGAGGGATACCGGATGCTCTTTCAGGACCTGGAGAAGAAAAGGAGCGGCTGGTG
 GTGGTGGACTGTGAATCAGAACGCCTCAATGCTATCTTGGGCCAGATTATAAAGCTAGAGAAGAATGGCA
 TCGGCTACCACTACATTCTTGAACATCTGGGCTTCATGGACATTGACTTAAACAAATTCAAGGAGAGTGG
 CGCAATGTGACAGGTTTCCAGCTGGTGAACCTACACAGACACTATTCCGGCCAAGATCATGCAGCAGTGG
 AAGAATAGTGATGCTCGAGACCACACCGGGTGGACTGGAAGAGACCCAAGTACACCTCTGCGCTCACCT
 ACGATGGGGTGAAGGTGATGGCTGAGGCTTCCAGAGCCTGCGGAGGCAGAGAATTGATATATCTCGCCG
 GGGGAATGCTGGGATTGTCTGGCTAACCCAGCTGTTCCCTGGGGCAAGGGATCGACATCCAGAGAGCT
 CTGCAGCAGTGCGATTGAAGGTTAACAGGAAACGTGCAGTTAATGAGAAAGGACGCCGGACCAACT
 ACACGCTCCAGTGATTGAAATGAAACATGACGGCATCCGAAAGATTGGTTACTGGAATGAAGATGATAA
 GTTTGTCCTGCAGCCACCGATGCCAAGCTGGGGCGATAATCAAGTGTTCAGAACAGAACATACATC
 GTCACAACAATCCTAGAAGATCCTTATGTGATGCTCAAGAAGAAGCGCAATCAGTTTGGGGCAATGACC
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 GATTGTGAGTGTGAAAATACGGAGCCCAGACCCTGACACGAAGGCCTGGAATGGCATGGTGGGAGAG
 CTGGTCTATGGAAGAGCAGATGTGGCTGTGGCTCCCTAACTATCACTTTGGTCCGGGAAGAAGTTATAG
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 TGTCTTCTCCTTCTGATCCTTTGGCTTATGAGATTTGGATGTGCATTGTTTTGCCTACATTGGAGTG
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 GGGACCAGACAACAGTGAACAGTCCAATGAGTTTGGGATATCAACAGTTTGTGGTTCTCCTGGGAGC
 CTTTCATGCAGCAAGGATGTGACATTTCTCCAGGTCCCTGTCTGGTTCGCATCGTTGGTGGCGTCTGGTGG
 TTCTTACCTTAATCATCATCTCCTCATATACAGCCAATCTGGCCGCCTTCTGACCGTGGAGAGGATGG
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 AACCTGGCAGTGTAAAACCTGAACGAGCAGGGGCTTTTGGACAAATTGAAAAACAAATGGTGGTACGACA
 AGGGCAGTGCAGCAGCGGGGAGGTGATTCCAAGGACAAGACAAGCGCTCTGAGCCTCAGCAATGTGGC
 AGGCGTGTCTACATCCTGATCGGAGGACTTGGACTAGCCATGCTGGTTGCCTTAATCGAGTTCTGCTAC
 AAATCCCGTAGTGAATCCAAGCGGATGAAGGGTTTTTGTGTTGATCCACAGCAATCCATCAACGAAGCCA
 TACGGACATCGACCTCCCCGCAACAGCGGGCAGGAGCCAGCAGCGCGGCAGTGGAGAGAATGGTGC
 GGTGGTACCCATGACTTCCCCAAGTCCATGCAATCGATTCTTGCATGAGCCACAGTTCAGGGATGCC
 TTGGGAGCCACGGGATTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – **GTTTAA**

Protein Sequence: >RG235030 representing NM_001258021
 Red=Cloning site Green=Tags(s)

MCCSTHLFQPLQLAGGLEWPWSNLLCFLTPVKLHPEVWGLFPNQSQEHAAFRFALSQLEPPKLLPQID
 IVNISDSFEMTYRFCSQFSKGVYAIFFGYERRTVNMLTSFCGALHVCFITPSFPVDTSNQFVLQLRPELQ
 DALISIIDHYKWQKFVYIYDADRGLSVLQKVLDTAAEKNWQVTAVNILLTTEEGYRMLFQDLEKKKERLV
 VVDCESERLNAILGQIIKLEKNGIGYHYILANLGFMDIDLNKFKESGANVTGFQLVNYTDTIPAKIMQQW
 KNSDARDHTRVDWKRPKYTSALTYDGVKVMAEAFQSLRRQRIDISRRGNAGDCLANPAVPWQGIDIQRA
 LQQVRFEGLTGNVQFNEKGRRTNYTLHVIEMKHGIRKIGYWNEDDKFVPAATDAQAGDNSSVQNRTYI
 VTTILEDPYVMLKKNANQFEGNDRYEGYCVLAAEIAKHVGYSYRLEIVSDGKYGARDPDTKAWNGMVGE
 LYYGRADVAVAPLTITLVREEVIDFSKPFMSLGISIMIKKPKQSKPGVFSFLDPLAYEIMCIVFAYIGV
 SVVLFVLSRFSPEYWHSEEFEEGRDQTTSDQSNFEGIFNSLWFSLGAFMQGCDISPRSLSGRIVGGVWW
 FFTLIISSYANLAFLTVERMVSPIESAEDLAKQTEIAYGTLEAGSTKEFFRRSKIIVFEKMWYMKMS
 AEPVSVFVRTTEGMIRVRKSKGKYAYLLESTMNEYIEQRKPCDTMKVGGNLDKSGYGIATPKGSALRNPV
 NLAVLKLNEQGLLDKLNKWWYDKGECGSGGGDSKDKTSALSLSNVAGVFYILIGLGLAMLVALIEFCY
 KSRSESKRMKGFLIPQQSINEAIRTSTLPRNSGAGASSGGSGENGRVVSDFPKSMQSIPCMSSHSGMP
 LGATGL

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

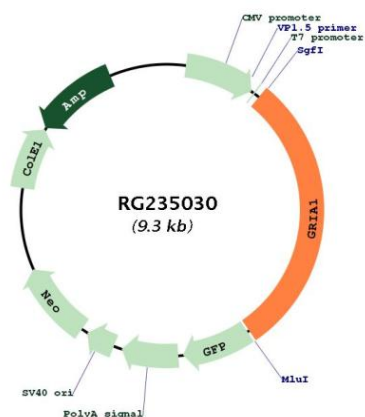
Cloning Scheme:



ACCN: NM_001258021

ORF Size:	2748 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:	<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_001258021.1 , NP_001244950.1
RefSeq Size:	5439 bp
RefSeq ORF:	2751 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 RG235030