

Product datasheet for **RC223525**

GRIA1 (NM_000827) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRIA1 (NM_000827) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RC223525 representing NM_000827
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCAGCACATTTTTGCCTTCTTCTGCACCGGTTTCTAGGCGGGTAGTAGGTCCAATTTCCCAACA
 ATATCCAGATCGGGGATTATTTCCAAACCAGCAGTCACAGGAACATGCTGCTTTTAGATTTGCTTTGTC
 GCAACTCACAGAGCCCCGAAGCTGCTCCCCAGATTGATATTGTGAACATCAGCGACAGCTTTGAGATG
 ACCTATAGATTCTGTTCCAGTTCTCCAAAGGAGTCTATGCCATCTTTGGGTTTTATGAACGTAGGACTG
 TCAACATGCTGACCTCTTTTGTGGGGCCTCCACGTCTGCTTACGCGGAGCTTTCCCGTTGATAC
 ATCCAATCAGTTTGTCTTCAGCTGCGCCTGAACTGCAGGATGCCCTCATCAGCATCATTGACCATTAC
 AAGTGGCAGAAATTTGTCTACATTTATGATGCCGACCGGGGCTTATCCGCTCCTGCAGAAAGTCTGGATA
 CAGCTGCTGAGAAGAACTGGCAGGTGACAGCAGTCAACATTTTGACAACCACAGAGGAGGGATACCGGAT
 GCTCTTTCAGGACCTGGAGAAGAAAAGGAGCGGCTGGTGGTGGTGGACTGTGAATCAGAACGCCTCAAT
 GCTATCTTGGGCCAGATTATAAAGCTAGAGAAGAAATGGCATCGGCTACCACTACATTTCTGCAAAATCTGG
 GCTTCATGGACATTGACTTAAACAAATCAAGGAGAGTGGCGCAATGTGACAGGTTTCCAGCTGGTGAA
 CTACACAGACACTATCCGGCCAAGATCATGCAGCAGTGGAGAATAGTGATGCTCGAGACCACACACGG
 GTGGACTGGAAGAGACCAAGTACACCTCTGCGCTCACCTACGATGGGGTGAAGGTGATGGCTGAGGCTT
 TCCAGAGCCTGCGGAGGCAGAGAATTGATATATCTCGCCGGGGAAATGCTGGGGATTGTCTGGCTAACCC
 AGCTGTTCCCTGGGGCCAAGGGATCGACATCCAGAGAGCTCTGCAGCAGGTGCGATTTGAAGTTTAAACA
 GAAACGTGCAGTTTAAATGAGAAAGGACGCCGACCAACTACACGCTCCACGTGATTGAAATGAAACATG
 TGGGGCCGATAAATCAAGTGTTTCAAGACAGAACATACATCGTCACAACAATCCTAGAAGATCCTTATGTG
 ATGCTCAAGAAGAACGCCAATCAGTTTGGAGGCAATGACCGTTACGAGGGCTACTGTGTAGAGCTGGCGG
 CAGAGATTGCCAAGCACGTGGGCTACTCTACCGTCTGGAGATTGTGAGTATGAAAAACGGAGCCCG
 AGACCCTGACACGAAGCCTGGAATGGCATGGTGGGAGAGCTGGTCTATGGAAGAGCAGATGTGGCTGTG
 GCTCCCTAACTATCACTTTGGTCCGGGAAGAAGTTATAGATTTCTCCAAACATTTATGAGTTTGGGGA
 TCTCCATCATGATTAACCAACACAGAAATCCAAGCCGGGTGCTTCTCCTTCTGTATCCTTTGGCTTA
 TGAGATTTGGATGTGATTGTTTTGCCTACATTTGGAGTGAAGTGTGCTCTTCTTCTGGTCAAGCCGCTC
 AGTCCCTATGAATGGCACAGTGAAGAGTTTGGGAAGGACGGGACCAGACAACCAGTGACCAGTCCAATG
 AGTTTGGGATATCAACAGTTTGTGTTTCTCCCTGGGAGCCTTATGCAGCAAGGATGTGACATTTCTCC
 CAGGTCCTGTCTGGTCCGATCGTTGGTGGCGTCTGGTGGTTCTTACCTTAATCATCATCTCCTCATAT
 ACAGCCAATCTGGCCGCTTCTGACCGTGGAGAGGATGGTGTCTCCATTGAGAGTGCAGAGGACCTAG
 CGAAGCAGACAGAAATTCCTACGGGACGCTGGAAGCAGGATCTACTAAGGAGTTCTTCCAGGAGTCTAA
 AATTGCTGTGTTGAGAAGATGTGGACATACATGAAGTCAAGCAGAGCCATCAGTTTTTGTGCGGACCACA
 GAGGAGGGGATGATTCGAGTGAAGAAATCCAAAGGCAATATGCCTACCTCCTGGAGTCCACCATGAATG
 AGTACATTGAGCAGCGGAAACCTGTGACACCATGAAGGTGGGAGGTAACCTGGATTCCAAGGCTATGG
 CATTGCAACACCCAAGGGGTCTGCCCTGAGAAATCCAGTAAACCTGGCAGTGTAAAACCTGAACGAGCAG
 GGGCTTTTGGACAAATGAAAAACAATGGTGGTACGACAAGGGCGAGTGCAGCAGCGGGGAGGTGATT
 CCAAGGACAAGACAAGCGCTCTGAGCCTCAGCAATGTGGCAGGCGTGTCTACATCCTGATCGGAGGACT
 TGGACTAGCCATGCTGGTTGCCTTAATCGAGTTCTGCTACAAATCCCGTAGTGAATCCAAGCGGATGAAG
 GGTTTTTGTGATCCCACAGCAATCCATCAACGAAGCCATACGGACATCGACCTCCCCCGCAACAGCG
 GGGCAGGAGCCAGCAGCGCGGCGAGTGGAGAGAATGGTCGGTGGTCAAGCATGACTTCCCCAAGTCCAT
 GCAATCGATTCTTGCATGAGCCACAGTTCAGGGATGCCCTTGGGAGCCACGGGATTG

ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223525 representing NM_000827
 Red=Cloning site Green=Tags(s)

MQHIAFFCTGFLGAVVGANFPNNIQIGGLFPNQSQEHAARFALSQLEPPKLLPQIDIVNISDSFEM
 TYRFCSQFSKGVYAIIFGFYERRTVNMLTSFCGALHVCFITPSFPVDTSNQFVLQLRPELQDALISIIDHY
 KWQKFVYIYDADRGLSVLQKVLDTAAEKNWQVTAVNILTTTEEGYRMLFQDLEKKKERLVVVDCESERLN
 AILGQIIKLEKNGIGYHYILANLGFMDIDLNKFKESSGANVTGFQLVNYTDTIPAKIMQQWKNSDARDHTR
 VDWRPKYTSALTYDGVKVMAEAFQSLRRQRIDISRRGNAGDCLANPAVPWQGGIDIQRALQQVRFEGLT
 GNVQFNEKGRRTNYTLHVIEMKHDGIRKIGYWNEDDKFVPAATDAQAGDNSSVQNRTYIVTTILEDPYV
 MLKKNANQFEGNDRYEGYCVELAAEIAKHVGYRLEIVSDGKYGARDPDTKAWNGMVGELVYGRADVAV
 APLTITLVREEVIDFSKPFMSLGISIMIKKPKQSKPGVFSFLDPLAYEIWMCIVFAYIGVSVVFLVSRF
 SPYEWHSSEEFEEGRDQTSDQSNEFGIFNSLWFSLGAFMQGCDISPRSLSGRIVGGVWFFTLIISSY
 TANLA AFLTVERMVSPIESAEDLAKQTEIAYGTLEAGSTKEFFRRSKIIVFEKMWTYMKSAEPSVFRVT
 EEGMIRVRKSKGKYAYLLESTMNEYIEQRKPCDTMKVGGNLDKSGYGIATPKGSALRNPVNLAVLKLNEQ
 GLLDLKLNKWWYDKGECGSGGGDSKDKTSALSLSNVAGVFYILIGGLGLAMLVALIEFCYKSRSESKRMK
 GFCLIPQQSINEAIRTSTLPRNSGAGASSGGSGENGRVVSDFPKSMQSI PCMSHSSGMPLGATGL

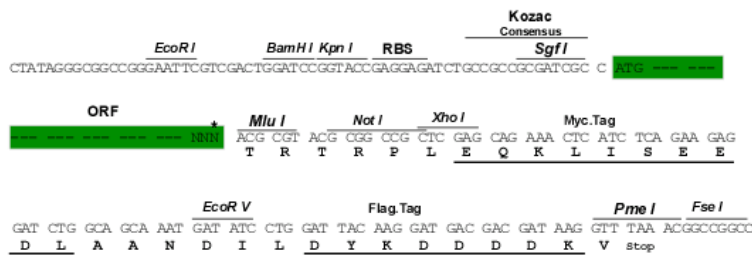
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2648_e05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

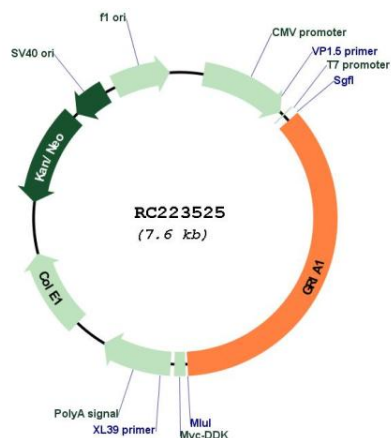


* The last codon before the Stop codon of the ORF

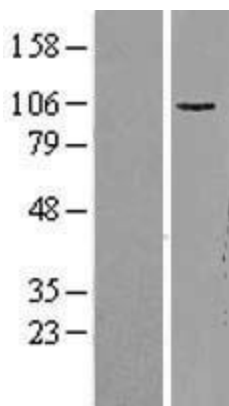
ACCN: NM_000827

ORF Size:	2718 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_000827.4
RefSeq Size:	3242 bp
RefSeq ORF:	2721 bp
Locus ID:	2890
UniProt ID:	P42261
Cytogenetics:	5q33.2
Domains:	lig_chan, ANF_receptor
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:	101.3 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 RC223525



Western blot validation of overexpression lysate (Cat# [LY400293]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223525 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).