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Product datasheet for SC127844

GLUR3 (GRIA3) (NM_007325) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GLUR3 (GRIA3) (NM_007325) Human Untagged Clone
Tag:	Tag Free
Symbol:	GLUR3
Synonyms:	GluA3; GLUR-C; GLUR-K3; GLUR3; GLURC; MRX94; MRXSW
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC127844 sequence for NM_007325 edited (data generated by NextGen Sequencing)

ATGGCCAGGCAGAAGAAAATGGGGCAAAGCGTGCTCCGGGCGGTCTTCTTTTTAGTCCTG
GGGCTTTTGGGTCATTCTCACGGAGGATTCCCCAACACCATCAGCATAGGTGGACTTTTC
ATGAGAAACACAGTGCAGGAGCACAGCGCTTTCCGCTTTGCCGTGCAGTTATACAACACC
AACCAGAACACCACCGAGAAGCCCTTCCATTTGAATTACCACGTAGATCACTTGGATTCC
TCCAATAGTTTTTCCGTGACAAATGCTTTCTGCTCCCAGTTCTCGAGAGGGGTGTATGCC
ATCTTTGGATTCTATGACCAGATGTCAATGAACACCCTGACCTCCTTCTGTGGGGCCCTG
CACACATCCTTTGTTACGCCTAGCTTCCCCACTGACGCAGATGTGCAGTTTGTCATCCAG
ATGCGCCCAGCCTTGAAGGGCGCTATTCTGAGTCTTCTGGGTCATTACAAGTGGGAGAAG
TTTGTGTACCTCTATGACACAGAACGAGGATTTTCCATCCTCCAAGCGATTATGGAAGCA
GCAGTGCAAAACAACTGGCAAGTAACAGCAAGGTCTGTGGGAAACATAAAGGACGTCCAA
GAATTCAGGCGCATCATTGAAGAAATGGACAGGAGGCAGGAAAAGCGATACTTGATTGAC
TGCGAAGTCGAAAGGATTAACACAATTTTGGAACAGGTTGTGATCCTAGGGAAACACTCA
AGAGGTTATCACTACATGCTCGCTAACCTGGGTTTTACTGATATTTTACTGGAAAGAGTC
ATGCATGGGGGAGCCAACATTACAGGTTTCCAGATTGTCAACAATGAAAACCCTATGGTT
CAGCAGTTCATACAGCGCTGGGTGAGGCTGGATGAAAGGGAATTCCCTGAAGCCAAGAAT
GCACCACTAAAGTATACATCTGCATTGACACACGACGCAATACTGGTCATAGCAGAAGCT
TTCCGCTACCTGAGGAGGCAGCGAGTAGATGTGTCCCGGAGAGGAAGTGCTGGAGACTGC
TTAGCAAATCCTGCTGTGCCCTGGAGTCAAGGAATTGATATTGAGAGAGCTCTGAAAATG
GTGCAAGTACAAGGAATGACTGGAAATATTCAATTTGACACTTATGGACGTAGGACAAAT
TATACCATCGATGTGTATGAAATGAAAGTCAGTGGCTCTCGAAAAGCTGGCTACTGGAAT
GAGTATGAAAGGTTTGTGCCTTTCTCAGATCAGCAAATCAGCAATGACAGTGCATCCTCA
GAGAATCGGACCATAGTAGTGACTACCATTCTGGAATCACCATATGTAATGTACAAGAAG
AACCATGAGCAACTGGAAGGAAATGAACGATATGAAGGCTATTGTGTAGACCTAGCCTAT
GAAATAGCCAAACATGTAAGGATCAAATACAAATTGTCCATCGTTGGTGACGGGAAATAT
GGTGCAAGGGATCCAGAGACTAAAATATGGAACGGCATGGTTGGGGAACTTGTCTATGGG
AGAGCTGATATAGCTGTTGCTCCACTCACTATAACATTGGTCCGTGAAGAAGTCATAGAT
TTTTCAAAGCCATTCATGAGCCTGGGCATCTCCATCATGATAAAGAAGCCTCAGAAATCA
AAACCAGGCGTATTCTCATTTCTGGATCCCCTGGCTTATGAAATCTGGATGTGCATTGTC
TTTGCTTACATTGGAGTCAGCGTAGTTCTTTTCCTAGTCAGCAGGTTCAGTCCTTATGAA
TGGCACTTGGAAGACAACAATGAAGAACCTCGTGACCCACAAAGTCCTCCTGATCCTCCA
AATGAATTTGGAATATTTAACAGTCTTTGGTTTTCCTTGGGTGCCTTTATGCAGCAAGGA
TGTGATATTTCTCCAAGATCACTCTCCGGGCGCATTGTTGGAGGGGTTTGGTGGTTCTTC
ACCCTGATCATAATTTCTTCCTATACTGCCAATCTCGCTGCTTTCCTGACTGTGGAGAGG
ATGGTTTCTCCCATAGAGAGTGCTGAAGACTTAGCTAAACAGACTGAAATTGCATATGGG
ACCCTGGACTCCGGTTCAACAAAAGAATTTTTCAGAAGATCCAAAATTGCTGTGTACGAG
AAAATGTGGTCTTACATGAAATCAGCGGAGCCATCTGTGTTTACCAAAACAACAGCAGAC
GGAGTGGCCCGAGTGCGAAAGTCCAAGGGAAAGTTCGCCTTCCTGCTGGAGTCAACCATG
AATGAGTACATTGAGCAGAGAAAACCATGTGATACGATGAAAGTTGGTGGAAATCTGGAT
TCCAAAGGCTATGGTGTGGCAACCCCTAAAGGCTCAGCATTARGAACGCCTGTAAACCTT
GCAGTATTGAAACTCAGTGAACAAGGCATCTTAGACAAGCTGAAAAACAAATGGTGGTAC
GATAAGGGGGAATGTGGAGCCAAGGACTCCGGGAGTAAGGACAAGACCAGCGCTCTGAGC
CTGAGCAATGTGGCAGGCGTTTTCTATATACTTGTCGGAGGTCTGGGGCTGGCCATGATG
GTGGCTTTGATAGAATTCTGTTACAAATCACGGGCAGAGTCCAAACGCATGAAACTCACA
AAGAACACCCAAAACTTTAAGCCTGCTCCTGCCACCAACACTCAGAATTATGCTACATAC
AGAGAAGGCTACAACGTGTATGGAACAGAGAGTGTTAAGATCTAG

Clone variation with respect to NM_007325.4
2323 g=>r

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_007325 unedited
GCGAATTCGGCACGAGGCTCTTGTCAGCTTCGTTTTAGGCGTAGCATGGCCAGGCAGAAG
AAAATGGGGCAAAGCGTGCTCCGGGCGGTCTTCTTTTTAGTCCTGGGGCTTTTGGGTCAT
TCTCACGGAGGATTCCCCAACACCATCAGCATAGGTGGACTTTTCATGAGAAACACAGTG
CAGGAGCACAGCGCTTTCCGCTTTGCCGTGCAGTTATACAACACCAACCAGAACACCACC
GAGAAGCCCTTCCATTTGAATTACCACGTAGATCACTTGGATTCCTCCAATAGTTTTTCC
GTGACAAATGCTTTCTGCTCCCAGTTCTCGAGAGGGGTGTATGCCATCTTTGGATTCTAT
GACCAGATGTCAATGAACACCCTGACCTCCTTCTGTGGGGCCCTGCACACATCCTTTGTT
ACGCCTAGCTTCCCCACTGACGCAGATGTGCAGTTTGTCATCCAGATGCGCCCAGCCTTG
AAGGGCGCTATTCTGAGTCTTCTGGGTCATTACAAGTGGGAGAAGTTTGTGTACCTCTAT
GACACAGAACGAGGATTTTCCATCCTCCAAGCGATTATGGAAGCAGCAGTGCANAACAAC
TGGCAAGTAACAGCAGGGTCTGTGGGAAACATANAGGACGTCCAAGAATTCAGGCGCATC
ATTGAAGAAATGGACAGGAGGCAGGAANAGCGATACTTGATTGACTGGGAAGTCGAAAGG
ATAAACACATTTGGACAGGGTGGTGATCTAGGGAACATCCAAGAGTTATACTCA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_007325 unedited
NGGGCCTGAGGTATTTCATCACTTAAGTATTAAAACTTTGTACAATACCTCATGGCAATG
AGGCTCTGTAGTTTATGCCCACACATGCAAATTACGCTTTTATAGCCATTAGTTTGCTTG
GCAATTTTTCTGTTCACTGAAGTACAGCTTTAACAACAAAAAGAAAAGAATTGGAAAAAA
AATCCTCAAGTGACTACTGCCAAACTCCCATAGCTTGAAGTTAGTAGCAGAAATTTGAAG
CAATCAACTTTTTTTTAAACATGCAAGTTTTTTTTAAAAAATAACAAACCAATTTACCCG
CCTCTTCATCTCAGTGACGTTTCCTCTCTGAAAAACTGATTTGAGTTAATAAACATACAT
TTTTCTTTATACAGTGCCTATGAAAACATTTGTGTGTAGGTTGGTTGGTTTGTTTTATAC
AACTTCATGTTCACACAGCGTGAGCTTCCCGCGCTGGGACATTATAGCATTCATAAGTTG
AAAATCACAGTTTCATGAAAACAAAACAAAACAAAAACACAACAGCTTTCTTTTTTTGTT
CAATACCATTTGAAATTTGACAAGTGAGTTGTTTGCTTATGACACCATTTTTGGAATGAA
AGTTTATAGTACACTTTTCTGGAAACATTTCGTTGGAACGATACTTCTTCCTTTCTTTTC
TGAAGACAAGAGCAAATATGCAGCGAGTCAACTAAGCATCTAAGGGTCACACTTGGGAAA
TGAATGCGAGCTCCTAGTTTTTGCAGTCTGGAAACTTCCCAATGCACGTTATCGATGAGA
GCAAACTACTGAACTACAGGAAGCATACGTCGTTATATAGGAAGTAATTAGTGAGTGGAG
ACTATTTCTTCGACTGTTCTGATGATGCCAACGGCAGGATGCAA

Restriction Sites: NotI-NotI

ACCN: NM_007325

Insert Size: 4500 bp

OTI Disclaimer: 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.

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

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_007325.2, NP_015564.2
RefSeq Size:	3148 bp
RefSeq ORF:	2685 bp
Locus ID:	2892
UniProt ID:	P42263
Cytogenetics:	Xq25
Protein Families:	Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane
Protein Pathways:	Long-term depression, 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 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 at this locus results in different isoforms, which may vary in their signal transduction properties. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (1) encodes isoform 1 (also known as flip isoform). RNA editing (AGA->GGA) changes Arg775Gly.