

Product datasheet for **SC121951**

GRIK2 (NM_021956) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: GRIK2 (NM_021956) Human Untagged Clone
Tag: Tag Free
Symbol: GRIK2
Synonyms: EAA4; GLR6; GluK2; GLUK6; GLUR6; MRT6
Vector: pCMV6-XL5
E. coli Selection: Ampicillin (100 ug/mL)
Cell Selection: None
Fully Sequenced ORF: >OriGene ORF sequence for NM_021956 edited

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GGGCGGCCGCGAATTCGGCACGAGCCTCGTGCCGAATTCGGCACGAGGCTTTCCGCCCC  
ACCTCCTCCGGCTGCTCCTCCCCGAGGACCACCCACCCCTCCCGCCACCTCACCCC  
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CTGAAGGAAGAAGGTCTAGAAAAGATTGGAACGTGGGATCCAGCCAGTGGCCTGAATATG
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_021956 unedited
 AGTCAAATTTGTATACGACTCACTATAGGGCGGCCGGAATTCGCACGAGCCTCGTGCC
 GAATTCGGCACGAGGCTTTTCCGCCGACCTCCTCCGGCTGCTCCTCCCCGAGGACCACC
 CCACCCCTCCCCGCCACCTCACCCCTAGCTCCAGGCTCGCGCGCCGGACATTGTGGG
 TGTGCGTGTGGATTTCTCCCGGATGCTCTCCGACTAACATGGATGTCCCACCATTCCTT
 GCAGTGAAGGTTGTTCCCTTGGCGCAGTGAGTGAAGAATGCAGCGATTGCTAATGGGT
 TTGGGAAGCGGAGACTCCTTCTCTCTATGACCATGCCGTGATCGTGTCTGCGGTAC
 CACTCGACGCATCCTCATTTCTACCCGAACCCAGGAGCCGAACGCTAGATCGGGGAAGTG
 GGTGCCGTGCGTGTGGGCACAGAAACCATGAAGATTATTTCCCGATTCTAAGTAATC
 CAGTCTTCAGGCGCACCGTTAAACTCCTGCTCTGTTTACTGTGGATTGGATATTCTCAAG
 GAACCACACATGTATTAAGATTTGGTGGTATTTTTGAATATGTGGAATCTGGCCCAATGN
 GAGCTGAGGAACCTGCATTTCAGATTTGCTGTGAACACAATTAACAGAAACAGAACATTGC
 TACCCAATACTACCTTACCTATGATACCCAGAAGATAAACCTTTATGATAGTTTTGAAG
 CATCCAAGAAAGCCTGTGATCAGCTGTCTCTTGGGGTGGCTGCCATCTTTCGGGCCTTCA
 CCAGCTCATCAGCAAACGAGTGCAGTCCATCTGCAATGCTCTGGGAGTTTCCCACATAC
 AGACCCGCTGAAACACCAAGTGTAGACAACAAAGATTCTCTCTATAGTAGGTTTTACCA
 GAACCTTTTTTTCATCAGCCGGGCCATTTT

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_021956 unedited TTAAAAGGGTTTACTACTTGNACCGCAGACCGCAATCNANGATCGATTTTTTTTTCTTTTT TTTTATATTCTTAGTGACACTTTTATTGGTTGCCCTGTTGGGCATTGATATTCCATCTCC TGGCAACAGTTGAGCTTCAAAGGAACCTGTAATTTCTCACTGGACTGCATTTGAAATCA GCCACAAAATGCGCATGTTAACATTCACCTCAGAAGAAAGGAGGAACCCATGATTTTCAGT GTAACCCCGTGAACCTTGGTTGATCCATGATGCTTGAATCAAGTCTGATCATTGCAAC TGCTTAGATCACAGAGTCTCTAGTTCATAGACACAGCGGCATGAAGTAACTCATTTTATT TTGCACAGGGTGCATATTTCCACAGGAAACATTCTGGCTAAATTGTTGGAAAAAGAGAC AGTTTGTGCTTGGGTGTTTGCCTCCAGCTTATGCCTGGTTTCTTTACCTGGCAACCTTT GTCGTAAAGGTGGCCATGTGAACTTCTTCTGGTTTCAAAAAGTGGCCCTGGGCTTAA GTTTAACCGACCTGGACCTTAAGGAACTCTAATTTTTTACCATGGCCTCAAAGGACCC TTTTTCATTGACCTTTTTTTGGATTTGATAAAAATCCCCGGCCCCAACTGAAACCC CAGCCGGGTGCAAAAATGAAAGCCCCATTTTTGAACCCAGGGCCTGGCTTTTTGTTT CTTTTTGGAACTTTGCCCTTTTCTTTAATAGGAGTGTCTTCTTCCCTAAAA AATCCGGGAATTTTGGCCTTTGGAACCCGGGGGGCCCTTCCCTTTAGTTAAGGCCCA ATTGGGAGGGCAACCCCGGGAAACCCTGGGGTGGCCCTTTGAAAAATTCAGGGGGAA CGGACTCTTTTTTTTTTGAACCCAA
Restriction Sites:	NotI-NotI
ACCN:	NM_021956
Insert Size:	3460 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
RefSeq:	NM_021956.2 , NP_068775.1
RefSeq Size:	3322 bp
RefSeq ORF:	2727 bp
Locus ID:	2898
UniProt ID:	Q13002 , Q8IY40 , A8K0H7
Domains:	lig_chan, ANF_receptor
Protein Families:	Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane
Protein Pathways:	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. This gene product belongs to the kainate family of glutamate receptors, which are composed of four subunits and function as ligand-activated ion channels. The subunit encoded by this gene is subject to RNA editing at multiple sites within the first and second transmembrane domains, which is thought to alter the structure and function of the receptor complex. Alternatively spliced transcript variants encoding different isoforms have also been described for this gene. Mutations in this gene have been associated with autosomal recessive cognitive disability. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) encodes the longer isoform (1). RNA editing changes Ile567Val, Tyr571Cys and Gln621Arg. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.