

Product datasheet for **MR219234**

Grik2 (NM_00111268) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grik2 (NM_00111268) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Grik2
Synonyms:	AW124492; C130030K03Rik; Glu; GluK2; Glur; Glur-6; Glur6; Glurbe; Glurbeta2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR219234 representing NM_001111268
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGATTATTTCCCCAGTTTTAAGTAATCTAGTCTTCAGTCGTCCTAAAGTCCTGCTCTGCTTGT
 TGTGGATCGGATATTCGCAAGGAACACACATGTGTTAAGATTCGGTGGTATATTTGAATATGTGGAATC
 TGGCCCTATGGGAGCTGAAGAACTTGCATTTCAGATTTGCTGTGAATACAATCAACAGGAACAGGACTCTG
 CTACCCAATACCACGTTAACATATGATACACAGAAGATCAATCTCTATGACAGTTTTGAAGCATCTAAGA
 AAGCTTGTGATCAGCTGTCTCTGGGGTGGCTGCCATCTTCGGTCTTCACACAGTTCATCAGCAAATGC
 TGTTTCAGTCCATCTGCAATGCTCTGGGGTTCCTCACATACAGACCCGCTGGAAGCACCAGGTGTCAGAC
 AATAAGGATTCCTTCTATGTCAGTCTCTACCCAGACTTCTCTCCCTCAGCCGTGCCATCTTGGATTTGG
 TGCAGTTTTTAAAGTGGAAAACGTGACAGTTGTGTATGACGACAGCACTGGTCTCATTGCTTGAAGA
 GCTCATCAAAGCTCCATCAAGGTACAATCTTCGACTTAAAATTCGTGAGTCCAGCTGATACAAAAGAT
 GCAAAGCCTTTGCTGAAAGAGATGAAGAGGGGCAAGGAGTCCACGTGATCTTCGACTGCAGCCATGAAA
 TGGCAGCAGGCATTTAAAGCAGGCATTAGCTATGGGAATGATGACAGAATACTACCACTATATATTTAC
 GACTCTGGACCTCTTCGCTCTTGATGTGGAGCCCTACAGATACAGTGGCGTAAAATGACAGGGTTCAGA
 ATACTAAATACAGAGAATACCCAAGTCTCCTCCATCATCGAGAAGTGGTCGATGGAACGGTTACAGGCAC
 CTCCAAAACCTGACTCAGGTTTGTCTGGATGGATTTATGACGACTGATGCTGCTCTGATGTATGATGCAGT
 GCACGTTGTGTCTGTAGCTGTCCAACAGTTTCCCAGATGACAGTCAGCTCCTTGAATGCAATCGACAC
 AAACCCGGCGCTTTGGGACTCGCTTATGAGCCTAATTAAGAGGCTCATTGGGAAGGTCTTACAGGCA
 GAATTACATTTAACAAAACCAATGGATTGCGAACAGATTTTGAATTTGGATGTGATCAGTCAAGGAAG
 AGGTCTGGAAGAAGATTGGGACTTGGGATCCATCCAGTGGCCTGAATATGACAGAAAAGTCAGAAAAGGGAAG
 CCAGCAAATATTACAGATTCATTGTCTAATCGTCTTTGATTGTTACCACCATTTTGAAGAACCATATG
 TCCTGTTTAAAGAAGTCTGACAAACCTCTCTATGGGAATGATCGATTTGAAGGCTACTGTATTGATCTTCT
 ACGAGAGTTATCTACAATCCTTGGCTTTACATATGAAATTAGGCTTGTGGAGGATGGGAAAATGAGGCC
 CAGGATGATGTGAATGGACAATGGAATGGAATGGTTCGTGAGCTAATTGATCATAAAGCTGACCTTGACG
 TTGCTCCACTGGCTATTACCTATGTTCTGTGAGAAGGTATCGACTTTTCAAAGCCGTTTATGACTCTTGG
 AATAAGTATTTGTACCGCAAGCCCAATGGTACAACCCAGGCGTCTTCTCCTTCTGAATCCTCTCTCC
 CCTGATATCTGGATGTATGTTCTGCTGGCTTGGTGGGTGTCAGTTGTGTGCTCTTGTGCATAGCCAGGT
 TTAGTCCCTATGAGTGGTATAATCCACACCCTTGAACCCCTGACTCAGAGGTGGTGGAAAACAATTTTAC
 CTTGCTAAATAGTTTCTGGTTTGGAGTTGGAGCTCTCATGCGGCAAGGTTCTGAGCTCATGCCAAAGCA
 CTCTCCACCAGGATAGTGGGAGGCATTTGGTGGTTTTTACACCTTATCATATTTCTTCTGATACCGCTA
 ACCTAGCCGCCTTTCTGACCGTGGAAACGCATGGAGTCGCCTATTGACTCTGCTGACGATTTAGCTAAGCA
 AACCAAGATAGAATATGGAGCAGTAGAGGACGGCGCAACCATGACGTTTTTCAAGAAATCAAAAATCTCA
 ACGTATGATAAAAATGTGGCATTATGAGCAGCAGGAGACAGTCTGTGCTTGTCAAAGCAATGAGGAAG
 GGATTCACAGTGTCTCACCTCCGATTAATGCTTTCTTAATGGAGTCAACGACCATCGATTTGTTACCCA
 GCGGAACGTGAACCTCACGCAGATTGGTGGCCTTATAGACTCAAAGGCTATGGTGTGGCACTCCCATG
 GGTTCTCCATATCGAGACAAAATCACCATAGCCATTCTTCAGTGCAGGAGGAAGCAAGCTGCACATGA
 TGAAGGAGAAGTGGTGGGAGGCAATGGCTGCCAGAGGAGGAGAGCAAAGAGGCCAGTGTCTAGGGGT
 GCAGAATATTGGTGGTATCTTATTGCTCTGGCAGCCGGCTTGGTGTCTCAGTTTTTGTGGCAGTGGGA
 GAGTTTTTATACAAATCCAAAAAAGCGTCAATTGGAAAAGAGGTCTTCTGTAGCGCCATGGTGGAAAG
 AACTGAGAATGTCTCTGAAGTGCCAGCGTCGGCTCAAACATAAGCCACAGGCCCCAGTTATTGTGAAAAC
 AGAAGAAGTTATCAACATGCACACATTTAACGACAGAAGGTTGCCAGGTAAGAAACCATGGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR219234 representing NM_001111268
 Red=Cloning site Green=Tags(s)

MKIISPVLNLFVSRSIKVLCLLWIGYSQGTTHVLRFGGIFEYVESGPMGAEELAFRFVNTINRNRTL
 LPNTTLTYDTQKINLYDSFEASKKACDQLSLGVAATFGPSSHSSANAVQSI CNALGVPHIQTRWKHQVSD
 NKDSFYVSLYPDFSSLRAILDVQFFKWKTVTVVYDDSTGLIRLQELIKAPSRYNLRKIRQLPADTKD
 AKPLLKEMKRGKEFHVIFDCSHEMAAGILKQALAMGMMTEYYHYIFTTLDLFDLVEPYRYSGVNMTGFR
 ILNNTENTQVSSIIIEKWSMERLQAPPKPDSSGLLDGFMTTDAALMYDAVHVVSVAVQQFPQMTVSSLQCNRH
 KPWRFGTRFMSLIKEAHWEGLTGRITFNKTNGLRDTDFLDVVISLKEEGLEKIGTWPSSSGLNMTESQK GK
 PANITDLSNRSLIVTTILEEPLYVLFKSDKPLYGNDRFEGYCIDLLRELSTILGFTYEIRLVEDGKYGA
 QDDVNGQWNGMVRELIDHKADLAVAPLAITYVREKVIDFSKPFMTLGISILYRKPNGTNPGVFSFLNPLS
 PDIWYVLLACLGVSCVLFVIARFSPYEWYNPHPCNPDSVVENNFTLLNSFWFGVGMALMRQGSSELMPKA
 LSTRIVGGIWWFFTLIISSYANLAAFLTVERMESPIDSAADLAKQTKIEYGAVEDGATMTFFKSKIS
 TYDKMWFMSRRQSVLVKSNEEGIQRVLTSDYAFLMESTTIEFVTQRNCNLQIGGLIDSKGYGVGTPM
 GSPYRDKITIAILQLQEEGKLHMMKEKWWRGNGCPEEESKEASALGVQNIIGGIFIVLAAGLVLSVFAVAG
 EFLYKSKNAQLEKRSFCSAMVEELRMSLKCQRRLKHKPQAPVIVKTEEVINMHTFNDRRPLPGKETMA

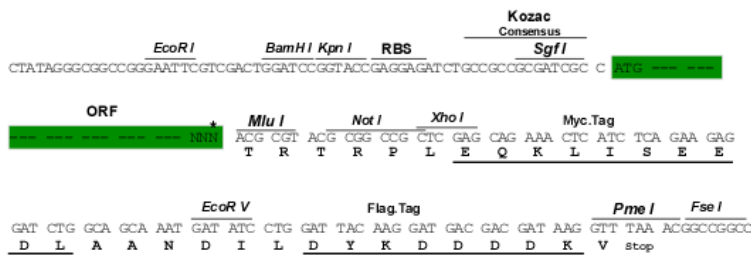
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9003_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

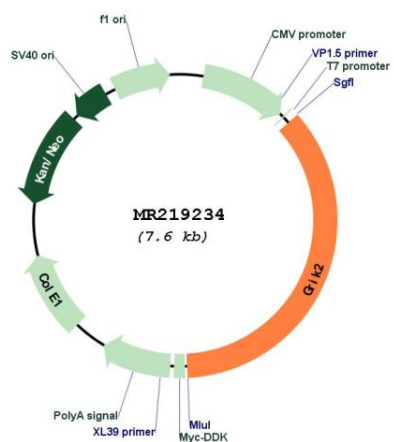


* The last codon before the Stop codon of the ORF

ACCN: NM_001111268

ORF Size:	2724 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_001111268.2
RefSeq Size:	4785 bp
RefSeq ORF:	2727 bp
Locus ID:	14806
Cytogenetics:	10 24.87 cM
MW:	102.9 kDa
Gene Summary:	<p>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 found for this gene. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for MR219234