

Product datasheet for **MG219233**

Grik2 (NM_010349) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grik2 (NM_010349) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Grik2
Synonyms:	AW124492; C130030K03Rik; Glu; GluK2; Glur; Glur-6; Glur6; Glurbe; Glurbeta2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>MG219233 representing NM_010349
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGATTATTTCCCCAGTTTTAAGTAATCTAGTCTTCAGTCGCTCCATTAAAGTCCTGCTCTGCTTGT
 TGTGGATCGGATATTCGCAAGGAACCACACATGTGTTAAGATTCGGTGGTATATTTGAATATGTGGAATC
 TGGCCCTATGGGAGCTGAAGAACTTGCATTTCAGATTTGCTGTGAATACAATCAACAGGAACAGGACTCTG
 CTACCCAATACCACGTTAACATATGATACACAGAAGATCAATCTCTATGACAGTTTTGAAGCATCTAAGA
 AAGCTTGTGATCAGCTGTCTCTTGGGGTGGCTGCCATCTTCGGTCTTCACACAGTTCATCAGCAAATGC
 TGTTTCAGTCCATCTGCAATGCTCTGGGGTTCCTCACATACAGACCCGCTGGAAGCACCAGGTGTCAGAC
 AATAAGGATTCCTTCTATGTCAGTCTCTACCCAGACTTCTCTCCCTCAGCCGTGCCATCTTGGATTTGG
 TGCAGTTTTTAAAGTGGAAAACGTGTCAGTGTGTATGACGACAGCACTGGTCTCATTTCGCTTGAAGA
 GCTCATCAAAGCTCCATCAAGGTACAATCTTCGACTTAAAATTCGTGAGTCCAGCTGATACAAAAGAT
 GCAAAGCCTTTGCTGAAAGAGATGAAGAGGGGCAAGGAGTCCACGTGATCTTCGACTGCAGCCATGAAA
 TGGCAGCAGGCATTTAAAGCAGGCATTAGCTATGGGAATGATGACAGAATACTACCACTATATATTTAC
 GACTCTGGACCTCTTCGCTCTTGATGTGGAGCCCTACAGATACAGTGGCGTAAAATGACAGGGTTCAGA
 ATACTAAATACAGAGAATACCCAAGTCTCCTCCATCATCGAGAAGTGGTCGATGGAACGGTTACAGGCAC
 CTCCAAAACCTGACTCAGGTTTGGCTGGATGATTTATGACGACTGATGCTGCTCTGATGTATGATGCAGT
 GCACGTTGTGTCTGTAGCTGTCCAACAGTTTCCCAGATGACAGTCAGCTCCTTGAATGCAATCGACAC
 AAACCTGGCGCTTTGGGACTCGCTTTCATGAGCCTAATTAAGAGGCTCATTGGGAAGGCTTACAGGCA
 GAATTACATTTAAACAAAACCAATGGATTGCGAACAGATTTTGGATTGGATGTGATCAGTCTCAAGGAAG
 AGGTCTGGAAGAAGATTGGGACTTGGGATCCATCCAGTGGCCTGAATATGACAGAAAAGTCAGAAAAGGGAAG
 CCAGCAAATATTACAGATTCATTGTCTAATCGTCTTTGATTGTTACCACCATTTTGAAGAACCATATG
 TCCTGTTTAAAGAAGTCTGACAAACCTCTCTATGGGAATGATCGATTTGAAGGCTACTGTATTGATCTTCT
 ACGAGAGTTATCTACAATCCTTGGCTTTACATATGAAATAGGCTTGTGGAGGATGGGAAATATGGAGCC
 CAGGATGATGTGAATGGACAATGGAATGGAATGGTTCGTGAGCTAATTGATCATAAAGCTGACCTTGCAG
 TTGCTCCACTGGCTATTACCTATGTTCTGTGAGAAGGTCATCGACTTTTCAAAGCCGTTTATGACTCTTGG
 AATAAGTATTTGTACCGCAAGCCCAATGGTACAACCCAGGCGTCTTCTCCTTCTGAATCCTCTCTCC
 CCTGATATCTGGATGTATGTTCTGCTGGCTTGGTGGGTGTCAGTTGTGTGCTCTTGTGCATAGCCAGGT
 TTAGTCCCTATGAGTGGTATAATCCACACCCTTGAACCCCTGACTCAGAGCTGGTGGAAAACAATTTTAC
 CTTGCTAAATAGTTTCTGGTTTGGAGTTGGAGCTCTCATGCGGCAAGGTTCTGAGCTCATGCCAAAAGCA
 CTCTCCACCAGGATAGTGGGAGGCATTTGGTGGTTTTTACACCTTATCATATTTCTTTCGTATACCGCTA
 ACCTAGCCGCCTTTCTGACCGTGGAAACGCATGGAGTCGCCTATTGACTCTGCTGACGATTTAGCTAAGCA
 AACCAAGATAGAATATGGAGCAGTAGAGGACGGCGCAACCATGACGTTTTTCAAGAAATCAAAAATCTCA
 ACGTATGATAAAAATGTGGCATTATGAGCAGCAGGAGACAGTCTGTGCTTGTCAAAGCAATGAGGAAG
 GGATTCACAGTGTCTCACCTCCGATTATGCTTTCTTAATGGAGTCAACGACCATCGATTTGTTACCCA
 GCGGAACCTGTAACCTCACGCAGATTGGTGGCCTTATAGACTCAAAGGCTATGGTGTGGCACTCCCATG
 GGTCTCCATATCGAGACAAAATCACCATAGCCATTCTTCAGTGCAGGAGGAAGCAAGCTGCACATGA
 TGAAGGAGAAGTGGTGGGAGGCAATGGCTGCCAGAGGAGGAGAGCAAAGAGGCCAGTGTCTAGGGGT
 GCAGAATATTGGTGGTATCTTATTGCTCTGGCAGCCGGCTTGGTGTCTCAGTTTTTGTGGCAGTGGGA
 GAGTTTTTATACAAATCCAAAAAAACGCTCAATTGGAAAAGGAATCTTCTATTTGGTTAGTGCCACCAT
 ACCATCCAGACACTGTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG219233 representing NM_010349
 Red=Cloning site Green=Tags(s)

MKIISPVLNLFVSRSIKVLCLLWIGYSQGTTHVLRFGGIFEFYVESGPMGAEELAFRFVNTINRNRTL
 LPNTTLTYDTQKINLYDSFEASKACDQLSLGVAATFGPSSHSSANAVQSI CNALGVPHIQTRWKHQVSD
 NKDSFYVSLYPDFSSLRAILDLVQFFKWKTVTVVYDDSTGLIRLQELIKAPSRYNLRLKIRQLPADTKD
 AKPLLKEMKRGKEFHVIFDCSHEMAAGILKQALAMGMMTEYYHYIFTTLDLFDLVEPYRYSGVNMTGFR
 ILNTEQVSSIIIEKWSMERLQAPPKPDSDLDFMTTDAALMYDAVHVVSVAVQQFPQMTVSSLQCNRH
 KPWRFGTRFMSLIKEAHWEGLTGRITFNKTNGLRTDFDLDVISLKEEGLEKIGTWDPSGLNMTE SQKGK
 PANITDSLNRSLIVTTILEEPYVLFKKS DKPLYGNDRFEGYCIDLLRELSTILGFTYEIRLVEDGKYGA
 QDDVNGQWNGMVRELIDHKADLAVAPLAITYVREKVIDFSKPFMTLGISILYRKPNGTNPGVFSFLNPLS
 PDIWMYVLLACLGVSCVLFVIARFSPYEWYNPHPCNPDSVVENNFTLLNSFWFGV GALMRQGS ELMPKA
 LSTRIVGGIWWFFTLIIISSYANLAAFLTVERMESPIDSAADLAKQTKIEYGAVEDGATMTFFKSKIS
 TYDKMWFMSRRQSVLVKSNEEIQRVLTSDYAFLMESTTIEFVTQRNCNLQIGGLIDSKGYGVGTPM
 GSPYRDKITIAILQLQEEGKLHMMKEKWWRGNCGPEEESKEASALGVQNI GGIFIVLAAGLVLSVFVAVG
 EFLYKSKNAQLEKESSIWLVPPYHPDTV

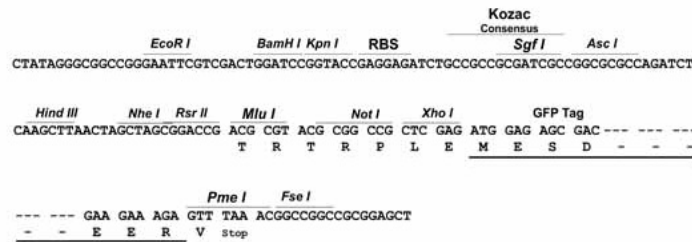
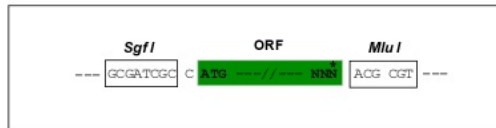
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

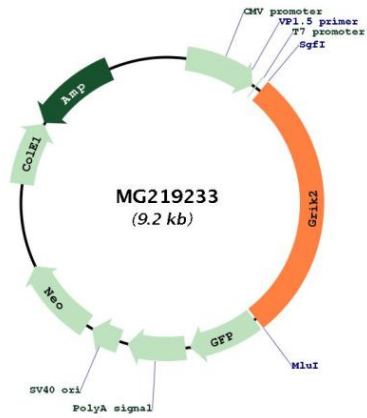
Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN:	NM_010349
ORF Size:	2607 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_010349.3
RefSeq Size:	4872 bp
RefSeq ORF:	2610 bp
Locus ID:	14806
Cytogenetics:	10 24.87 cM
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 found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for MG219233