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Product datasheet for MR210866

Grik1 (BC031822) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grik1 (BC031822) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Grik1
Synonyms:	MGC25101
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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ORF Nucleotide Sequence:

>MR210866 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCAATACCACATTAACCTATGACATCCAGAGAATTAATCTTTTTGATAGTTTTGAAGCCTCCCGAA
GAGCATGCGACCAACTGGCTCTTGGGGTGGCCGCCCTCTTCGGTCCTTCCCACAGCTCCTCCGTCAGTGC
TGTACAGTCTATTTGCAATGCTCTGGAAGTTCCACACATTCAGACTCGCTGGAAACACCCTTCTGTGGAC
AACAGAGACTTATTTTACATCAACCTCTACCCAGATTATGCAGCTATCAGCAGGGCAGTCCTGGATCTGG
TCCTCTATTACAACTGGAAAACAGTGACGGTGGTGTACGAAGACAGCACAGGTCTAATTCGTCTGCAAGA
GCTCATCAAAGCTCCCTCCAGATACAACATCAAAATCAAAATCCGCCAGCTTCCCTCTGGCAATAAGGAT
GCCAAACCTCTGCTCAAGGAGATGAAGAAAGGCAAGGAGTTCTATGTGATATTTGATTGTTCGCACGAGA
CGGCTGCTGAAATTCTTAAGCAGATTTTGTTCATGGGCATGATGACTGAATACTATCACTACTTCTTCAC
AACCCTGGACTTGTTTGCTTTGGATCTGGAACTCTACAGGTACAGTGGTGTAAATATGACTGGATTTCGG
TTGCTGAATATTGACAACCCTCACGTGTCATCCATCATTGAGAAGTGGTCCATGGAGAGATTGCAGGCCC
CACCCAGACCTGAGACTGGTCTCCTGGACGGCGTGATGACAACTGAAGCAGCTCTGATGTACGATGCTGT
GTACATGGTAGCCATCGCCTCTCACCGTGCCTCTCAGCTGACCGTCAGTTCCCTGCAGTGCCATCGACAT
AAGCCATGGCGCCTAGGACCCAGATTTATGAACCTCATCAAAGAGGCGCGGTGGGATGGCTTGACGGGGC
GGATCACCTTCAATAAGACGGATGGCTTGAGAAAGGATTTTGACCTGGACATTATCAGTCTCAAAGAGGA
AGGAACTGAAAAGATTGGGATTTGGAACTCCAACAGTGGGCTGAACATGACGGATGGCAACAGAGACAGG
TCCAACAATATCACAGATTCGCTGGCTAACCGAACGCTCATTGTCACCACTATTCTGGAAGAGCCCTACG
TGATGTACAGGAAATCCGATAAACCACTGTACGGAAATGACAGATTTGAAGGATATTGCCTGGATCTGCT
GAAAGAACTGTCAAATATCCTAGGTTTCCTTTATGATGTTAAACTGGTTCCTGACGGCAAATATGGAGCC
CAGAATGACAAAGGGGAGTGGAACGGGATGGTTAAGGAACTCATCGACCACAGAGCTGACCTAGCAGTGG
CCCCTCTCACCATCACGTATGTACGGGAGAAAGTCATTGACTTCTCCAAGCCTTTCATGACTCTGGGCAT
TAGCATCCTTTACCGGAAGCCCAATGGAACCAACCCCGGCGTCTTCTCCTTCCTCAACCCCCTGTCTCCA
GACATTTGGATGTATGTGCTCCTCGCTTGCCTAGGAGTCAGTTGTGTGCTTTTTGTGATTGCAAGGTTCA
CACCCTACGAGTGGTATAACCCCCACCCGTGCAACCCTGACTCAGACGTGGTGGAAAACAATTTCACTTT
GCTAAATAGTTTCTGGTTTGGCGTTGGAGCTCTCATGCGGCAAGGATCGGAGCTGATGCCCAAGGCTCTA
TCGACCAGAATAGTTGGAGGAATATGGTGGTTTTTCACCCTAATCATCATCTCATCCTACACTGCCAACC
TGGCTGCCTTCTTGACAGTAGAAAGGATGGAATCCCCCATCGATTCCGCAGACGACCTGGCCAAACAAAC
CAAGATAGAATACGGGGCAGTCAGAGATGGCTCGACAATGACCTTCTTCAAGAAATCAAAAATCTCCACG
TATGAGAAAATGTGGGCTTTCATGAGCAGTAGACAGCAGAGCGCCCTGGTTAAAAACAGCGATGAGGGGA
TCCAAAGGGTGCTTACCACCGACTACGCCCTGCTGATGGAGTCCACCAGCATTGAGTATGTGACACAGAG
GAACTGCAACCTCACTCAGATCGGGGGCCTCATAGACTCCAAAGGCTATGGAGTGGGGACACCTATCGGC
TCCCCTTACCGGGATAAAATTACAATTGCTATTCTTCAACTACAAGAAGAAGGGAAGCTTCATATGATGA
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TTCATATACAAATCACGGAAGAACAATGACATTGAGCAGGCTTTTTGTTTCTTTTATGGACTGCAGTGTA
AACAAACCCATCCGACCAACTCCACTTCCGGGACTACATTATCTACAGATGTAGAGTGTGGCAAATTATT
ACGAGAGGAAAAGGGGATTCGGACACAGCCCTCAGTCCATACTGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>MR210866 protein sequence
Red=Cloning site Green=Tags(s)

MPNTTLTYDIQRINLFDSFEASRRACDQLALGVAALFGPSHSSSVSAVQSICNALEVPHIQTRWKHPSVD
NRDLFYINLYPDYAAISRAVLDLVLYYNWKTVTVVYEDSTGLIRLQELIKAPSRYNIKIKIRQLPSGNKD
AKPLLKEMKKGKEFYVIFDCSHETAAEILKQILFMGMMTEYYHYFFTTLDLFALDLELYRYSGVNMTGFR
LLNIDNPHVSSIIEKWSMERLQAPPRPETGLLDGVMTTEAALMYDAVYMVAIASHRASQLTVSSLQCHRH
KPWRLGPRFMNLIKEARWDGLTGRITFNKTDGLRKDFDLDIISLKEEGTEKIGIWNSNSGLNMTDGNRDR
SNNITDSLANRTLIVTTILEEPYVMYRKSDKPLYGNDRFEGYCLDLLKELSNILGFLYDVKLVPDGKYGA
QNDKGEWNGMVKELIDHRADLAVAPLTITYVREKVIDFSKPFMTLGISILYRKPNGTNPGVFSFLNPLSP
DIWMYVLLACLGVSCVLFVIARFTPYEWYNPHPCNPDSDVVENNFTLLNSFWFGVGALMRQGSELMPKAL
STRIVGGIWWFFTLIIISSYTANLAAFLTVERMESPIDSADDLAKQTKIEYGAVRDGSTMTFFKKSKIST
YEKMWAFMSSRQQSALVKNSDEGIQRVLTTDYALLMESTSIEYVTQRNCNLTQIGGLIDSKGYGVGTPIG
SPYRDKITIAILQLQEEGKLHMMKEKWWRGNGCPEEDSKEASALGVENIGGIFIVLAAGLVLSVFVAIGE
FIYKSRKNNDIEQAFCFFYGLQCKQTHPTNSTSGTTLSTDVECGKLLREEKGIRTQPSVHTV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

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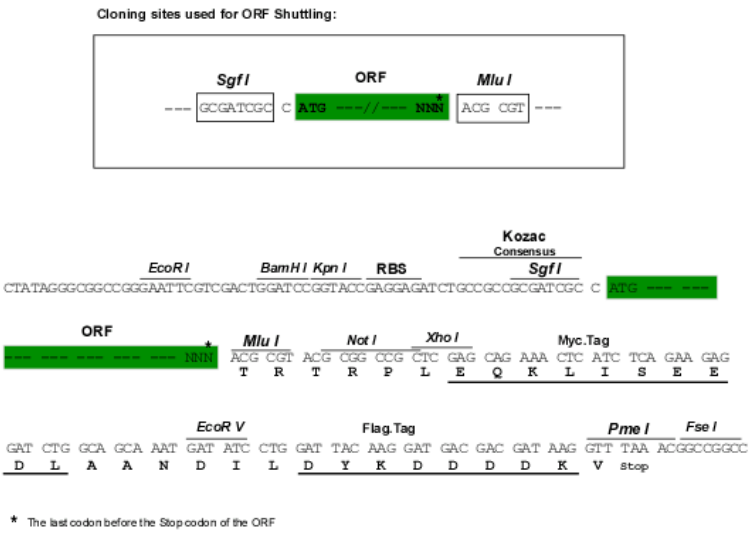
Cloning Scheme:



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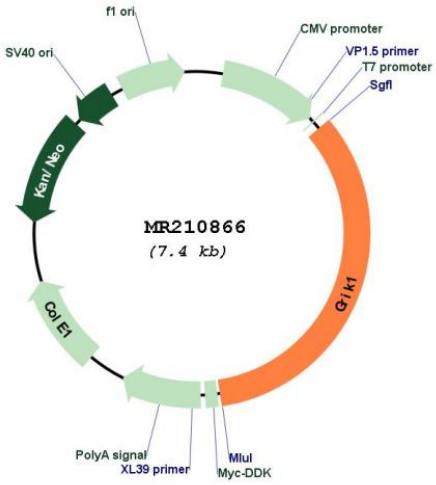
Plasmid Map:



ACCN:	BC031822
ORF Size:	2496 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:	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:	BC031822, AAH31822
RefSeq Size:	3020 bp
RefSeq ORF:	2498 bp
Locus ID:	14805
Cytogenetics:	16 50.23 cM

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MW: 94.1 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. 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 (CAG->CGG; Q->R) within the second transmembrane domain, which is thought to alter the properties of ion flow. Alternative splicing, resulting in transcript variants encoding different isoforms, has been noted for this gene. [provided by RefSeq, Jul 2008]

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