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Product datasheet for MC222510

Grik1 (NM_010348) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grik1 (NM_010348) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Grik1
Synonyms:	A830007B11Rik; D16Ium2; D16Ium24; D16Ium24e; Glu; GluK; GluK1; GluK5; Glur; Glur-5; Glur5; Glurbe; Glurbeta1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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Fully Sequenced ORF:

>MC222510 representing NM_010348
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCGCGGCACAGTCCTTATCCAACCCGGGCTCTGGACCAGGGACACCAGCTGGACACTCCTCTATT
TCCTGTGCTACATCCTTCCTCAGACCTCCCCTCAAGTGCTCAGGATCGGAGGGATTTTTGAAACTGTGGA
AAACGAACCTGTTAATGTTGAAGAATTAGCTTTCAAGTTTGCAGTCACCAGTATTAACCGAAACCGAACC
TTGATGCCCAATACCACATTAACCTATGACATCCAGAGAATTAATCTTTTTGATAGTTTTGAAGCCTCCC
GAAGAGCATGCGACCAACTGGCTCTTGGGGTGGCCGCCCTCTTCGGTCCTTCCCACAGCTCCTCCGTCAG
TGCTGTACAGTCTATTTGCAATGCTCTGGAAGTTCCACACATTCAGACTCGCTGGAAACACCCTTCTGTG
GACAACAGAGACTTATTTTACATCAACCTCTACCCAGATTATGCAGCTATCAGCAGGGCAGTCCTGGATC
TGGTCCTCTATTACAACTGGAAAACAGTGACGGTGGTGTACGAAGACAGCACAGGTCTAATTCGTCTGCA
AGAGCTCATCAAAGCTCCCTCCAGATACAACATCAAAATCAAAATCCGCCAGCTTCCCTCTGGCAATAAG
GATGCCAAACCTCTGCTCAAGGAGATGAAGAAAGGCAAGGAGTTCTATGTGATATTTGATTGTTCGCACG
AGACGGCTGCTGAAATTCTTAAGCAGATTTTGTTCATGGGCATGATGACTGAATACTATCACTACTTCTT
CACAACCCTGGACTTGTTTGCTTTGGATCTGGAACTCTACAGGTACAGTGGTGTAAATATGACTGGATTT
CGGTTGCTGAATATTGACAACCCTCACGTGTCATCCATCATTGAGAAGTGGTCCATGGAGAGATTGCAGG
CCCCACCCAGACCTGAGACTGGTCTCCTGGACGGCGTGATGACAACTGAAGCAGCTCTGATGTACGATGC
TGTGTACATGGTAGCCATCGCCTCTCACCGTGCCTCTCAGCTGACCGTCAGTTCCCTGCAGTGCCATCGA
CATAAGCCATGGCGCCTAGGACCCAGATTTATGAACCTCATCAAAGAGGCGCGGTGGGATGGCTTGACGG
GGCGGATCACCTTCAATAAGACGGATGGCTTGAGAAAGGATTTTGACCTGGACATTATCAGTCTCAAAGA
GGAAGGAACTGAAAAGATTGGGATTTGGAACTCCAACAGTGGGCTGAACATGACGGATGGCAACAGAGAC
AGGTCCAACAATATCACAGATTCGCTGGCTAACCGAACGCTCATTGTCACCACTATTCTGGAAGAGCCCT
ACGTGATGTACAGGAAATCCGATAAACCACTGTACGGAAATGACAGATTTGAAGGATATTGCCTGGATCT
GCTGAAAGAACTGTCAAATATCCTAGGTTTCCTTTATGATGTTAAACTGGTTCCTGACGGCAAATATGGA
GCCCAGAATGACAAAGGGGAGTGGAACGGGATGGTTAAGGAACTCATCGACCACAGAGCTGACCTAGCAG
TGGCCCCTCTCACCATCACGTATGTACGGGAGAAAGTCATTGACTTCTCCAAGCCTTTCATGACTCTGGG
CATTAGCATCCTTTACCGGAAGCCCAATGGAACCAACCCCGGCGTCTTCTCCTTCCTCAACCCCCTGTCT
CCAGACATTTGGATGTATGTGCTCCTCGCTTGCCTAGGAGTCAGTTGTGTGCTTTTTGTGATTGCAAGGT
TCACACCCTACGAGTGGTATAACCCCCACCCGTGCAACCCTGACTCAGACGTGGTGGAAAACAATTTCAC
TTTGCTAAATAGTTTCTGGTTTGGCGTTGGAGCTCTCATGCGGCAAGGATCGGAGCTGATGCCCAAGGCT
CTATCGACCAGAATAGTTGGAGGAATATGGTGGTTTTTCACCCTAATCATCATCTCATCCTACACTGCCA
ACCTGGCTGCCTTCTTGACAGTAGAAAGGATGGAATCCCCCATCGATTCCGCAGACGACCTGGCCAAACA
AACCAAGATAGAATACGGGGCAGTCAGAGATGGCTCGACAATGACCTTCTTCAAGAAATCAAAAATCTCC
ACGTATGAGAAAATGTGGGCTTTCATGAGCAGTAGACAGCAGAGCGCCCTGGTTAAAAACAGCGATGAGG
GGATCCAAAGGGTGCTTACCACCGACTACGCCCTGCTGATGGAGTCCACCAGCATTGAGTATGTGACACA
GAGGAACTGCAACCTCACTCAGATCGGGGGCCTCATAGACTCCAAAGGCTATGGAGTGGGGACACCTATC
GGCTCCCCTTACCGGGATAAAATTACAATTGCTATTCTTCAACTACAAGAAGAAGGGAAGCTTCATATGA
TGAAAGAGAAATGGTGGAGGGGAAATGGCTGCCCTGAAGAAGACAGTAAAGAAGCCAGTGCTCTAGGAGT
GGAAAATATCGGGGGTATCTTCATTGTTCTGGCTGCAGGACTCGTCCTTTCTGTGTTTGTAGCCATTGGA
GAATTCATATACAAATCACGGAAGAACAATGACATTGAGCAGTGTCTCTCTTTCAATGCCATCATGGAAG
AGCTGGGAATCTCACTCAAGAATCAGAAAAAATTAAAGAAAAAGTCAAGAACTAAGGGCAAATCTTCTTT
CACAAGTATCCTTACTTGTCATCAGAGACGAACTCAGAGAAAAGAGACTGTGGCGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_010348

Insert Size:	2718 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).
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_010348.3, NP_034478.1
RefSeq Size:	3573 bp
RefSeq ORF:	2718 bp
Locus ID:	14805
Cytogenetics:	16 50.23 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 (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] Transcript Variant: This variant (2) is missing an in-frame coding exon at the 3' end compared to transcript variant 1, resulting in a shorter isoform (b) lacking a 29 aa segment compared to isoform a. RNA editing (CAG->CGG) changes Gln621Arg.