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Product datasheet for MG222517

Grik1 (NM_146072) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grik1 (NM_146072) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Grik1
Synonyms:	A830007B11Rik; D16Ium2; D16Ium24; D16Ium24e; Glu; GluK; GluK1; GluK5; Glur; Glur-5; Glur5; Glurbe; Glurbeta1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG222517 representing NM_146072
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCGCGGCACAGTCCTTATCCAACCCGGGCTCTGGACCAGGGACACCAGCTGGACACTCCTCTATT
TCCTGTGCTACATCCTTCCTCAGACCTCCCCTCAAGTGCTCAGGATCGGAGGGATTTTTGAAACTGTGGA
AAACGAACCTGTTAATGTTGAAGAATTAGCTTTCAAGTTTGCAGTCACCAGTATTAACCGAAACCGAACC
TTGATGCCCAATACCACATTAACCTATGACATCCAGAGAATTAATCTTTTTGATAGTTTTGAAGCCTCCC
GAAGAGCATGCGACCAACTGGCTCTTGGGGTGGCCGCCCTCTTCGGTCCTTCCCACAGCTCCTCCGTCAG
TGCTGTACAGTCTATTTGCAATGCTCTGGAAGTTCCACACATTCAGACTCGCTGGAAACACCCTTCTGTG
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AGAGCTCATCAAAGCTCCCTCCAGATACAACATCAAAATCAAAATCCGCCAGCTTCCCTCTGGCAATAAG
GATGCCAAACCTCTGCTCAAGGAGATGAAGAAAGGCAAGGAGTTCTATGTGATATTTGATTGTTCGCACG
AGACGGCTGCTGAAATTCTTAAGCAGATTTTGTTCATGGGCATGATGACTGAATACTATCACTACTTCTT
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GAGGAACTGCAACCTCACTCAGATCGGGGGCCTCATAGACTCCAAAGGCTATGGAGTGGGGACACCTATC
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CAATGCCATCATGGAAGAGCTGGGAATCTCACTCAAGAATCAGAAAAAATTAAAGAAAAAGTCAAGAACT
AAGGGCAAATCTTCTTTCACAAGTATCCTTACTTGTCATCAGAGACGAACTCAGAGAAAAGAGACTGTGG
CG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG222517 representing NM_146072
Red=Cloning site Green=Tags(s)

MERGTVLIQPGLWTRDTSWTLLYFLCYILPQTSPQVLRIGGIFETVENEPVNVEELAFKFAVTSINRNRT
LMPNTTLTYDIQRINLFDSFEASRRACDQLALGVAALFGPSHSSSVSAVQSICNALEVPHIQTRWKHPSV
DNRDLFYINLYPDYAAISRAVLDLVLYYNWKTVTVVYEDSTGLIRLQELIKAPSRYNIKIKIRQLPSGNK
DAKPLLKEMKKGKEFYVIFDCSHETAAEILKQILFMGMMTEYYHYFFTTLDLFALDLELYRYSGVNMTGF
RLLNIDNPHVSSIIEKWSMERLQAPPRPETGLLDGVMTTEAALMYDAVYMVAIASHRASQLTVSSLQCHR
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RSNNITDSLANRTLIVTTILEEPYVMYRKSDKPLYGNDRFEGYCLDLLKELSNILGFLYDVKLVPDGKYG
AQNDKGEWNGMVKELIDHRADLAVAPLTITYVREKVIDFSKPFMTLGISILYRKPNGTNPGVFSFLNPLS
PDIWMYVLLACLGVSCVLFVIARFTPYEWYNPHPCNPDSDVVENNFTLLNSFWFGVGALMRQGSELMPKA
LSTRIVGGIWWFFTLIIISSYTANLAAFLTVERMESPIDSADDLAKQTKIEYGAVRDGSTMTFFKKSKIS
TYEKMWAFMSSRQQSALVKNSDEGIQRVLTTDYALLMESTSIEYVTQRNCNLTQIGGLIDSKGYGVGTPI
GSPYRDKITIAILQLQEEGKLHMMKEKWWRGNGCPEEDSKEASALGVENIGGIFIVLAAGLVLSVFVAIG
EFIYKSRKNNDIEQKGKSSRLRFYFRNKVRFHGSKTESLGVEKCLSFNAIMEELGISLKNQKKLKKKSRT
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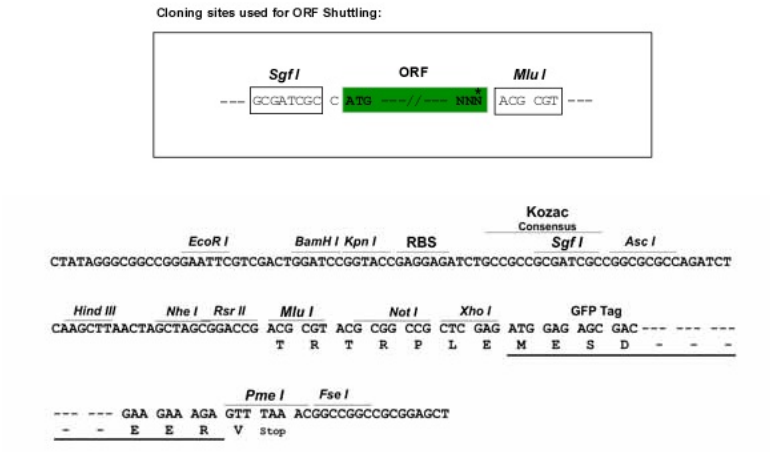
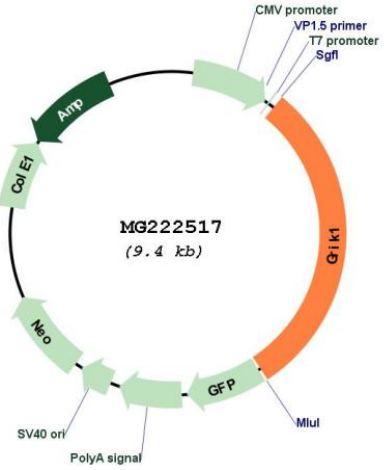
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_146072
ORF Size:	2802 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:	NM_146072.4, NP_666184.2
RefSeq Size:	3660 bp
RefSeq ORF:	2805 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]