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Product datasheet for RR200377

Grik1 (NM_001111117) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grik1 (NM_001111117) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Grik1
Synonyms:	GluK1; GluR5
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

View online »

ORF Nucleotide Sequence:

>RR200377 representing NM_001111117
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCGCAGCACAGTCCTTATCCAACCCGGGCTCTGGACCAGGGACACCAGCTGGACACTCCTCTATT
TCCTGTGCTACATCCTCCCTCAGACCTCCCCTCAAGTGCTCAGGATCGGAGGGATTTTTGAAACTGTGGA
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TTGATGCCCAATACCACATTAACCTATGACATCCAGAGAATTAATCTTTTTGATAGTTTTGAAGCCTCCC
GAAGAGCATGCGACCAGCTGGCTCTCGGGGTGGCCGCACTCTTCGGCCCTTCCCACAGCTCCTCCGTCAG
TGCTGTACAGTCTATTTGCAATGCTCTGGAAGTTCCACACATTCAGACTCGCTGGAAACACCCTTCCGTG
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CACAACCCTGGACTTGTTTGCTTTAGATCTGGAACTCTATAGGTACAGCGGTGTAAATATGACTGGATTT
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TCCTTACTTGTCACCAGAGACGAACTCAGAGAAAAGAGACAGTGGCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR200377 representing NM_001111117
Red=Cloning site Green=Tags(s)

MERSTVLIQPGLWTRDTSWTLLYFLCYILPQTSPQVLRIGGIFETVENEPVNVEELAFKFAVTSINRNRT
LMPNTTLTYDIQRINLFDSFEASRRACDQLALGVAALFGPSHSSSVSAVQSICNALEVPHIQTRWKHPSV
DSRDLFYINLYPDYAAISRAVLDLVLYYNWKTVTVVYEDSTGLIRLQELIKAPSRYNIKIKIRQLPPANK
DAKPLLKEMKKSKEFYVIFDCSHETAAEILKQILFMGMMTEYYHYFFTTLDLFALDLELYRYSGVNMTGF
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GFLYDVKLVPDGKYGAQNDKGEWNGMVKELIDHRADLAVAPLTITYVREKVIDFSKPFMTLGISILYRKP
NGTNPGVFSFLNPLSPDIWMYVLLACLGVSCVLFVIARFTPYEWYNPHPCNPDSDVVENNFTLLNSFWFG
VGALMQQGSELMPKALSTRIVGGIWWFFTLIIISSYTANLAAFLTVERMESPIDSADDLAKQTKIEYGAV
RDGSTMTFFKKSKISTYEKMWAFMSSRQQSALVKNSDEGIQRVLTTDYALLMESTSIEYVTQRNCNLTQI
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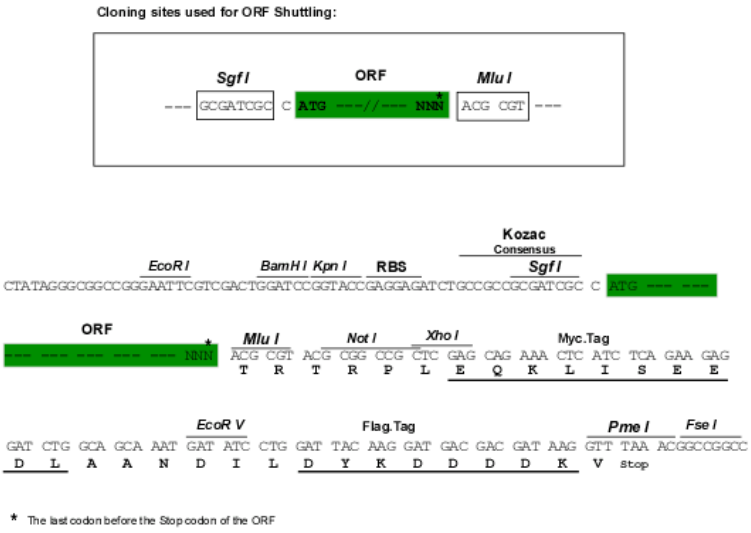
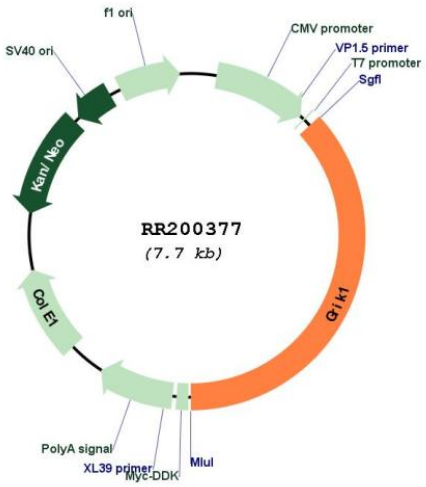
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001111117
ORF Size:	2847 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_001111117.1, NP_001104587.1
RefSeq Size:	3331 bp
RefSeq ORF:	2850 bp
Locus ID:	29559
UniProt ID:	P22756
Cytogenetics:	11q11

MW: 108 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]