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Product datasheet for RR200120

Grik3 (NM_181373) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grik3 (NM_181373) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Grik3
Synonyms:	GluK3; gluR-7; GluR7
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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ORF Nucleotide Sequence:

>RR200120 representing NM_181373
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACCGCTCCCTGGCGGCGCCTCCGGAGTCTGGTTTGGGAATACTGGGCCGGGTTCCTCGTGTGCGCCT
TCTGGATCCCAGACTCGCGCGGGATGCCCCACGTCATCCGGATCGGCGGAATCTTTGAGTACGCGGACGG
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GCTGCAGGAGCTCATCATGGCTCCATCTAGGTACAACATCCGCCTGAAGATTCGCCAGCTCCCCATCGAC
TCCGATGACTCACGCCCCTTGCTCAAAGAGATGAAGCGGGGCCGGGAGTTCCGTATCATCTTTGACTGCA
GTCACACCATGGCAGCCCAGATCCTCAAGCAGGCCATGGCCATGGGCATGATGACGGAATACTACCACTT
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RR200120 representing NM_181373
Red=Cloning site Green=Tags(s)

MTAPWRRLRSLVWEYWAGFLVCAFWIPDSRGMPHVIRIGGIFEYADGPNAQVMNAEEHAFRFSANIINRN
RTLLPNTTLTYDIQRIHFHDSFEATKKACDQLALGVVAIFGPSQGSCTNAVQSICNALEVPHIQLRWKHH
PLDNKDTFYVNLYPDYASLSHAILDLVQSLKWRSATVVYDDSTGLIRLQELIMAPSRYNIRLKIRQLPID
SDDSRPLLKEMKRGREFRIIFDCSHTMAAQILKQAMAMGMMTEYYHFIFTTLDLYALDLEPYRYSGVNLT
GFRILNVDNPHVSAIVEKWSMERLQAAPRAESGLLDGVMMTDAALLYDAVHIVSVCYQRAPQMTVNSLQC
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KALSTRIIGGIWWFFTLIIISSYTANLAAFLTVERMESPIDSADDLAKQTKIEYGAVKDGATMTFFKKSK
ISTFEKMWAFMSSKPSALVKNNEEGIQRTLTADYALLMESTTIEYITQRNCNLTQIGGLIDSKGYGIGTP
MGSPYRDKITIAILQLQEEDKLHIMKEKWWRGSGCPEEENKEASALGIQKIGGIFIVLAAGLVLSVLVAV
GEFIYKLRKTAEREQVRPWRRLRWTGKEALFLQHSGRRDPLLPHLPAASQAQATASYDGQDRCGYQHAHL

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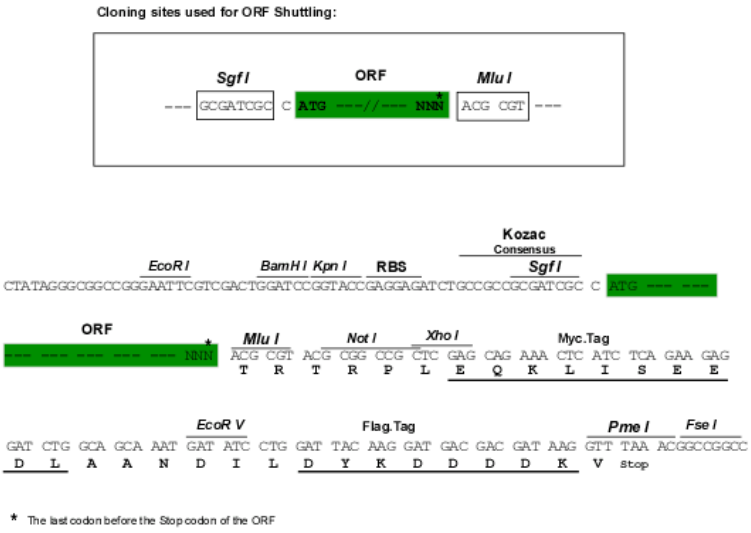
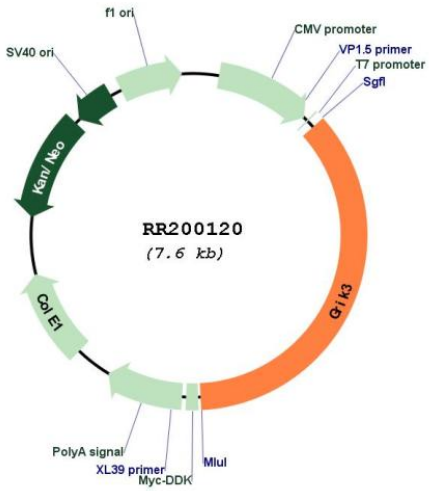
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_181373
ORF Size:	2730 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_181373.3, NP_852038.2
RefSeq Size:	3634 bp
RefSeq ORF:	2733 bp
Locus ID:	298521
UniProt ID:	P42264
Cytogenetics:	5q36

MW: 103.1 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. Compared to other kainate or AMPA receptors, this subunit exhibits a lower sensitivity to glutamate, and thus may play a unique role in neurotransmission in the brain. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2008]