

## Product datasheet for **RN200120**

### **Grik3 (NM\_181373) Rat Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Grik3 (NM_181373) Rat Untagged Clone
Tag:	Tag Free
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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**Fully Sequenced ORF:** >RN200120 representing NM\_181373  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACCGCTCCCTGGCGGCGCTCCGGAGTCTGGTTTGGGAATACTGGGCGGGTTCCTCGTGTGCGCT  
 TCTGGATCCCAGACTCGCGGGGATGCCCCACGTCATCCGGATCGCGGAATCTTTGAGTACGCGGACGG  
 CCCAACGCCAGGTCATGAACGCTGAGGAGCACGCCCTTCGGTTTTCTGCCAATATCATCAACAGGAAC  
 AGAACTCTGTGCCAACACGACCCTGACTTACGACATTCAGAGGATTCATTCCATGACAGTTTTGAGG  
 CCACCAAGAAGGCTGTGACCAGTTGGCGCTCGGTGTGGTAGCCATCTTTGGGCCATCCCAGGGCTCCTG  
 CACCAATGCCGTCCAGTCCATCTGCAATGCCTGGAGGTTCTCACATCCAACGCGCTGGAAGCACCCAC  
 CCCCTGGACAACAAGGACACCTTCTACGTGAACCTTACCCCGACTACGCTCTCTCAGCCACGCCATCC  
 TCGACTTGGTCCAGTCCCTCAAGTGGCGGTGAGCCACCGTAGTCTATGATGACAGTACAGGTCTCATCCG  
 GCTGCAGGAGCTCATCATGGCTCCATCTAGGTACAACATCCGCCGAAGATTCGCCAGCTCCCCATCGAC  
 TCCGATGACTCAGCCCCCTTGCTCAAAGAGATGAAGCGGGGCGGGAGTTCGGTATCATCTTTGACTGCA  
 GTCACACCATGGCAGCCAGATCCTCAAGCAGGCCATGGCCATGGGCATGATGACGGAATACTACCACTT  
 CATCTTACCACCTCTGGATCTCTATGCGTAGACCTGGAACCCTACCGCTACTCGGGAGTGAACCTGACT  
 GGGTTCGCATACTCAACGTGGACAACCCCATGTCTCAGCCATTGTGGAGAAGTGGTCCATGGAGCGGC  
 TACAGGACAGTCCCCGGGAGAGTCAAGGCTGCTGGATGGAGTGTGATGACCGATGCAGCCCTGCTCTA  
 CGATGGGTCCACATTGTGTCTGTGTCTACCAGCGAGCGCCGAGATGACTGTGAACTCCCTACAGTGC  
 CATCGGCACAAGGCTGGCGCTTCGGTGGCCGCTTCATGAACTTCATCAAGGAGGCTCAATGGGAAGGAT  
 TAATGGACGGATTGTTTTCAACAAAATAAGTGGCTTGGGACTGATTTTGATCTGGACATCATCAGCCT  
 CAAGGAAGATGGCTCGAGAAGGTGCGGGTGTGGAGTCCAGCTGACGGTCTCAATATCACTGAGGTTGCC  
 AAAGGCCGAGGTCTAATGTACCGACTCTCTGACCAACAGGTCACTCATCGTACCACTCTGCTGGAGG  
 AGCCTTTTGTGATGTTCCGCAAGTCTGATAGGACCTTTACGGCAATGACCGGTTGAGGGCTACTGCAT  
 CGACTTGTCAAGGAGTGGCGCACATCTGGGCTTCTCCTACGAGATCCGGCTGGTGAAGACGGCAAG  
 TACGGGGCACAGGACGACAAGGGCCAGTGAACGGCATGGTCAAGGAACTCATTGACCACAAAGCAGATC  
 TGGCTGTGGCTCCCTGACCATACCCATGTCCGAGAGAAGGCCATTGACTTCTTAAGCCTTTTATGAC  
 CCTCGGAGTGAGCATTTATATCGAAAACCAATGGCACCAACCCAGTGTCTTCTCCTCTCAACCCC  
 CTGTCCCAGACATCTGGATGTACGTGCTACTCGCTACCTGGGTGTCAGCTGTGTCTCTTCGTATTG  
 CCAGATTCAGCCCTTATGAATGGTATGATGCCACCCCTGCAACCCCGGCTCTGAGGTGGTGGAGAATAA  
 CTTACGCTGCTCAACAGCTTCTGGTTTGAATGGGCTCCCTGATGCAACAAGGATCTGAACTGATGCC  
 AAAGCTCTGTCTACCCGCATCATTGGCGGCATCTGGTGGTTCTTACCCTTATTATCATCTCCTCTACA  
 CGGCCAACCTGGCTGCCTTCTGACCGTGGAGCGCATGGAGTCAACCCATCGACTCTGCCGATGACCTGGC  
 CAAGCAGACAAAATAGAGTACGGTGTGTCAAGGATGGGGCCACCATGACCTTCTTCAAGAAATCCAAG  
 ATCTCCACCTTTGAGAAGATGTGGGCTTCATGAGCAGCAAGCCCTCGGCTCTGGTGAAGAAATGAGG  
 AGGGCATCCAGCGGACACTCACAGTACTACGCTCTGCTCATGGAGTCCAGACCATAGAGTACATCAC  
 ACAAGGAACTGCAATCTCACCCAGATCGGCGGCTCATCGATTCCAAGGGCTACGCGATCGGCACGCCC  
 ATGGGCTCCCCCTACAGGGACAAAATCACCATCGCCATTCTGCAGCTGCAGGAGGAGGACAAGCTGCACA  
 TCATGAAGGAGAAGTGGTGGCGAGGACGCGGTGCCCGAGGAGGAGAACAAGGAGGCCAGCGCACTGGG  
 CATCCAGAAGATTGGCGGCATCTTCATCGTCTGGCTGCCGGCTTAGTCTGTCCGTGTTGGTGGCAGTG  
 GGCGAGTTTATATAAACTCCGCAAGACAGCGGAACGGGAGCAGGTGAGGCCCTGGAGGAGGCTGCGTT  
 GGACAGGGAAGGAAGCGCTTTTCTGCAGCACAGTGGCCGACGAGATCCGCTTCTCCCTCACCTGCCAGC  
 GGCGTCTCAAGCACAAGCCACAGCTCTATGATGGTCAAGACAGATGCGGTTATCAACATGCACACCTT  
 TAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

<b>ACCN:</b>	NM_181373
<b>Insert Size:</b>	2733 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_181373.3</a> , <a href="#">NP_852038.2</a>
<b>RefSeq Size:</b>	3634 bp
<b>RefSeq ORF:</b>	2733 bp
<b>Locus ID:</b>	298521
<b>UniProt ID:</b>	<a href="#">P42264</a>
<b>Cytogenetics:</b>	5q36
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (2, also known as GluR7b) uses a different donor splice site at the penultimate exon compared to transcript variant 1. This results in a frame-shift and a shorter isoform (2) with a distinct C-terminus compared to isoform 1.</p>