

## Product datasheet for RN207651

### Grin2b (NM\_012574) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Grin2b (NM_012574) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Grin2b
Synonyms:	GluN2B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-Myc-DDK (PS100007)
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>RN207651 representing NM_012574 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGCCAGCGCAGAGTGCTGTTCCCAAGTCTGGTTGGTGTGGCCGTCTTGCCGTATCAGGCA  
GCAAAGCTCGTTCCAAAAGAGCCCCCAGCATCGGCATCGCTGCATCCTCGTGGCACTTCAGACGA  
AGTGGCCATAAAAGACGCCACGAGAAAGATGACTTCCATCATCTCTCAGTAGTCCCGGGTGGAGCTG  
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TCAGACTCTACCCCATCCTGGGCATCCATGGGGCTCATCTATGATAATGGCGGATAAGGATGAGTCC  
TCCATGTTCTCCAGTTTGGCCGTCTATCGAACAGCAAGCTTCCGTCATGCTCAACATCATGGAAGAAT  
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CAGTACCATCGAGAACAGCTTCTGGGCTGGGAGCTCGAGGAAGTCCCTCTGCTAGACATGTCTCTGGAC  
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CCTCGGACATGCTGTCCGAACACAGTTTCATCCCTGAGCCCAAGAGCAGTTGCTACAACACCCACGAGAA  
GAGGATCTACCAGTCTAACATGTTGAATAGGTATCTGATCAATGTCACTTTTGAAGGGAGAAACCTGTCC  
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AGAGGGTGGGAAATGGAAGGACAAGTCCCTGCAGATGAAGTATTATGTGTGGCTCGGATGTGTCTGA  
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AGCGTGGACCCTCTCAGTGAACCTGCATGAGGAATACAGTCCCGTGCCAGAAGCGCATCATCTCTGAGA  
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AATTTCTAAGTCTGTGAAGTTCACCTATGACCTTTACCTGGTACCAATGCAAGCACGGGAAGAAGATT



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AATGGGACCTGGAATGGCATGATCGGTGAGGTGGTTCATGAAGAGGGCCTACATGGCAGTGGGATCACTAA  
 CTATCAATGAAGAACGGTCAGAGGTGGTTGACTTCTCTGTACCCTTCATAGAAACTGGCATCAGTGTGAT  
 GGTATCTCGCAGCAATGGGACTGTGTACCTTCTGCCCTTTAGAGCCATTACAGCGCTGACGTGTGGGTG  
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 CCTGTTCAGTGACTACATTAGCGAGGTAGAGAGAACATTTGGTAACCTGCAGTGAAGGACAGCAATGTG  
 TACCAAGACCACTATCACCATCACCACCGGCCACACAGCATCGGCAGCACCAGCTCCATTGATGGGCTCT  
 ATGACTGTGACAACCCACCTTACCACCCAGGTCATCAGCAAGAAACCCCTGGACATCGCCCT  
 GCCCTCCTCAAACATAGCCAGCTCAGCGACTGTATGGCAAGTCTCTTTCAAGAGTGACCGCTACAGT  
 GGCCACGACGACTTGATTGATCGATCGGATGTCTCCGACATCTCCACGCACACTGTACCTATGGGAACATCG  
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 ATCGAGGAGGGAGTTTGATGAAATCGAGCTGGCCTACCGTCCGCCGACCACCCCGCTCCCCGGACCACAAG  
 CGCTACTTCAGGGACAAAGAAGGGCTCCGAGACTTCTACCTGGACCAGTCCGAACAAAGGAGAAGTCCG  
 CTCACTGGGAGCAGTGGACTTGACTGACATTTACAAAGAACGCAGTGACGACTTCAAGCGAGATTCCGT  
 CAGTGGAGGTGGCCCTGTACCAACAGGTCTCACCTCAAACACGGAACGGGCGAGAAGCAGGAGTGGTA  
 GCGGGGTGCCTGCTCCTTGGGAGAAGAACCTGACCAATGTGGATTGGGAGGACCGGTCTGGGGCAACT  
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 GGCTGCATCAGATGTGAGGCCTGTAAGAAGGCTGGTAACCTGTACGACATCAGCAAGGACAACCTCCCTG  
 CAGGAACTGGACCAGCCGGCTGCCCCCGTGGCTGTGACATCCAACGCCTCCAGCACAAGTACCCTCAA  
 GCCCGACTAATCCAAGGCTCAGAAGAAGAATCGGAACAAACTGCCCGGCAGCATTCTACGACACCTT  
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 ATGGATGGGAGCCCTACGCCATATGTTTGGATGCCAGCTGGTGGAGGCTCCTTTGCCAACAAGTCTC  
 CAGTGGCCACTGCCGGACACCACCAACAACCCCGGCAGCGGTACATGCTCAGCAAGTCTGCTTACCC  
 TGACCGGGTACGCAAAACCTTTTCATCCCCACTTTTGGGGATGACCAGTCTTGTCTTACGGCAGCAAA  
 TCCTACTTCTCAGGCAGCCACGGTGGCAGGGCGTCAAAAACAAGGCCGGACTCCGGGCCCTTGTC  
 CCAATAAGCCAGTGGTGTGAGCCCTTATGGGGTGTGCCAGGTCGTTTCCAGAAGGACATTTGTATAGG  
 GAACCAGTCCAACCCCTGTGTGCCTAACAAACAAAACCCAGGGCTTCAATGGCTCCAGCAATGGACAT  
 GTTTATGAGAACTTTCTAGTATTGAGTCTGATGTCTGA

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Chromatograms: [https://cdn.origene.com/chromatograms/ja1905\\_e07.zip](https://cdn.origene.com/chromatograms/ja1905_e07.zip)
- Restriction Sites: SgfI-Mlul
- ACCN: NM\_012574
- Insert Size: 4449 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	<p>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).</p>
<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_012574.1</a> , <a href="#">NP_036706.1</a>
<b>RefSeq Size:</b>	5259 bp
<b>RefSeq ORF:</b>	4449 bp
<b>Locus ID:</b>	24410
<b>UniProt ID:</b>	<a href="#">Q00960</a>
<b>Cytogenetics:</b>	4q43
<b>Gene Summary:</b>	<p>subunit of the NMDA receptor glutamate gated ion channel; displays voltage dependent sensitivity to magnesium, calcium permeability, and glycine regulated activity; may facilitate learning and long term potentiation [RGD, Feb 2006]</p>