

Product datasheet for SC122120

NMDAR2A (GRIN2A) (NM_000833) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NMDAR2A (GRIN2A) (NM_000833) Human Untagged Clone
Tag:	Tag Free
Symbol:	NMDAR2A
Synonyms:	EPND; FESD; GluN2A; LKS; NMDAR2A; NR2A
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC122120 sequence for NM_000833 edited (data generated by NextGen Sequencing)

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ATGGGCAGAGTGGGCTATTGGACCTGCTGGTGTGCTGCCGGCCCTTCTGGTCTGGCGCGGT
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 ACCCCAGGGTTTTAAATTCCTGCAGCAATAGACGCGTGTACAAGAAAATGCCTAGTATC
 GAATCTGATGTTAA

Clone variation with respect to NM_000833.3

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_000833 unedited</p> <pre>CATTTGTAATACGACTACTATAGGGCGGCCGGAATTCGGCACGAGGGCGCTGGGGCCG CAGCATGCGGGAACCCGCTAAACCCGGTGGCTGCTGAGGCGGCCGAGATGCTCGTGCGCG CAGCGCGCCCCACTGCATCCTCGACCTTCTCGGGCTACAGGGACCGTCAGTGGCGACTAT GGGCAGAGTGGGCTATTGGACCTGCTGGTGTGCCGGCCTTCTGGTCTGGCGCGGTCC GGCGCCGAGCGCGCGGGCGGAAAAGGGTCCCCCGCGCTAAATATTGCGGTGATGCTGGG TCACAGCCACGACGTGACAGAGCGCAACTTCGAACACTGTGGGGCCCCGAGCAGGCGGC GGGCCTGCCCTGGACGTGAACGTGGTAACCTCTGCTGATGAACCGCAACCGACCCCCA AGAGGCCTCATCACCGCCACGTGGTGCAGACCCTCAATGTCCGGGGGGCACGGCAATCCC ACGGGCCCTCGTGGTTTGGGGGACGGAAACAACGGGAACCCAAGGAAGGGCCCGGTA ANCNCCAAGAATGGCCCTGGGAATTTTAAATCNCCTTCCCCAACCAACCTTTTTCGT TCCCCCATTCTTTGGGGCAAATTTTATTGGGGGGGGCCCAATCCTTATTGAATC CAATGGGCCTTGAACAAAGGGATTTTTCGAACTTTCTAACCCCTTTTCTTTCCAATT TTTTTGAAGAGGTTGTAATTACTCGAAACAAAAAACGCCCCAGGGGGTCAATTGC CCTGAAAACATATCATTGGCCGGGATTTTAAATGAACTTGGGCAATTGGTCTTTCTCC CCTGGGTGGGACCAACTAAATCTTTCCCTTGGGCTTACCAGGGGAAATTTTATTCAA ACTTTTCTTCAAAAAACCAAGTTGGGACAAACCCACCTTTGGTGGGCTGGGGCCA ATTGCCAATGTGTATCACCCCTGGGGCAAATTTTCTTTTGGAAAG</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_000833 unedited</p> <pre>CATTGCAACTTCCACGCCAGGAGAGGCACTGGGGAGGGGTACAGGGATGCCACCCGGGA TCTGTTACAGAAACAGCTATGACCGCGCCGCAATCTAGAGTTCGAGTTTTTTTTTTTTTGG TTTTTTGCTTGGGATCATCACATTGAAGAGTCATTGAATTAGTAGAGAAGGGATACCAT AACTTTGTGTAGCATAACATTTCTGATTATTTATTTGAAAAACACTTCGGTCAGTGAA AAGAATATATTTTTTTTCAGAACACTTACTGTTGATTCTTTCCAAGGCCACGTTTTTCACT TTCTTTATCCAGAGATGTATGGGGTTAATAGCAGAAATAATGCTGCTGTTAGGGGAAGGC TTTCTGACCGATGAAGTCAGTCCAAGTATAACTCTCACTCTCCCTGGAGGTCTCTGTGGC ATTTGGCAGCCCCCTGGGTTTAGAGGACACCAGAGGAAGACAGAAAGCCTCTTTGGCTTG ACGACAAATCACTCTTCTGTATTCTGGGGAGACTTTTTAATTCATTTCATGTCAAAACATC CCAGACTCATGAGGAAATGGAAGCGATCCTTGCTGGGGTGGATAAAGTCTGGATGCCACT TGAGGGCACAAAGGTA AAAAGGCTAAAAGGATACCATCTGGGATATCAATTAGATCCGAGG TGGGGCTATCTGGGCCTTTTATCAGGTTCCAAGGTGGTCTGGGCACCAGTCACTTCCGA ATAAATGCTTTTAAACAATGGTCCGACTATTGCCTTTGGTTTAAATGAAGAACCC</pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_000833
Insert Size:	8000 bp
OTI Disclaimer:	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).
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:	<ol style="list-style-type: none">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_000833.2 , NP_000824.1
RefSeq Size:	6293 bp
RefSeq ORF:	4395 bp
Locus ID:	2903
UniProt ID:	Q12879
Cytogenetics:	16p13.2
Protein Families:	Druggable Genome, Ion Channels: Glutamate Receptors, Ion Channels: Sodium, Transmembrane
Protein Pathways:	Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Calcium signaling pathway, Long-term potentiation, Neuroactive ligand-receptor interaction, Systemic lupus erythematosus
Gene Summary:	<p>This gene encodes a member of the glutamate-gated ion channel protein family. The encoded protein is an N-methyl-D-aspartate (NMDA) receptor subunit. NMDA receptors are both ligand-gated and voltage-dependent, and are involved in long-term potentiation, an activity-dependent increase in the efficiency of synaptic transmission thought to underlie certain kinds of memory and learning. These receptors are permeable to calcium ions, and activation results in a calcium influx into post-synaptic cells, which results in the activation of several signaling cascades. Disruption of this gene is associated with focal epilepsy and speech disorder with or without cognitive disability. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR, compared to variant 1. Transcript variants 1 and 2 encode the same isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>