

Product datasheet for RC223623L4

OriGene Technologies, Inc.

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NMDAR2B (GRIN2B) (NM_000834) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: NMDAR2B (GRIN2B) (NM_000834) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: NMDAR2B

Synonyms: DEE27; EIEE27; GluN2B; hNR3; MRD6; NMDAR2B; NR2B; NR3

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC223623).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_000834

ORF Size: 4452 bp



NMDAR2B (GRIN2B) (NM_000834) Human Tagged Lenti ORF Clone - RC223623L4

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: <u>NM 000834.2</u>

 RefSeq Size:
 6240 bp

 RefSeq ORF:
 4455 bp

 Locus ID:
 2904

UniProt ID: Q13224

Cytogenetics: 12p13.1

Domains: lig chan

Protein Families: Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane

Protein Pathways: Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Huntington's disease, Long-term

potentiation, Neuroactive ligand-receptor interaction, Systemic lupus erythematosus

MW: 166.37 kDa

Gene Summary: This gene encodes a member of the N-methyl-D-aspartate (NMDA) receptor family within the

ionotropic glutamate receptor superfamily. The encoded protein is a subunit of the NMDA

receptor ion channel which acts as an agonist binding site for glutamate. The NMDA

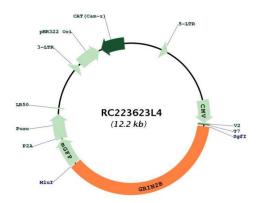
receptors mediate a slow calcium-permeable component of excitatory synaptic transmission in the central nervous system. The NMDA receptors are heterotetramers of seven genetically encoded, differentially expressed subunits including NR1 (GRIN1), NR2 (GRIN2A, GRIN2B, GRIN2C, or GRIN2D) and NR3 (GRIN3A or GRIN3B). The early expression of this gene in development suggests a role in brain development, circuit formation, synaptic plasticity, and cellular migration and differentiation. Naturally occurring mutations within this gene are associated with neurodevelopmental disorders including autism spectrum disorder, attention

deficit hyperactivity disorder, epilepsy, and schizophrenia. [provided by RefSeq, Aug 2017]

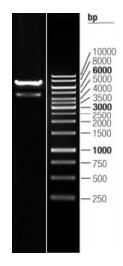
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Product images:



Circular map for RC223623L4



Double digestion of RC223623L4 using Sgfl and Mlul