

# Product datasheet for RC216458L2

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## NMDAR1 (GRIN1) (NM\_007327) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: NMDAR1 (GRIN1) (NM\_007327) Human Tagged Lenti ORF Clone

Tag: mGFP

Synonyms: GluN1; MRD8; NDHMSD; NDHMSR; NMD-R1; NMDA1; NMDAR1; NR1

Mammalian Cell None

Selection:

Symbol:

**Vector:** pLenti-C-mGFP (PS100071)

NMDAR1

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

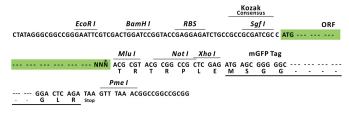
**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC216458).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





 $<sup>\</sup>ensuremath{^*}$  The last codon before the Stop codon of the ORF.

**ACCN:** NM\_007327

ORF Size: 2814 bp



**OTI Disclaimer:** 

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.

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. <u>More info</u>

**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:

Cytogenetics:

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 007327.1</u>

9q34.3

 RefSeq Size:
 5137 bp

 RefSeq ORF:
 2817 bp

 Locus ID:
 2902

 UniProt ID:
 Q05586

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

**Protein Pathways:** Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Calcium signaling pathway,

Huntington's disease, Long-term potentiation, Neuroactive ligand-receptor interaction

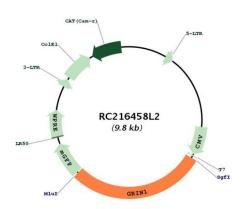
MW: 105.37 kDa



#### **Gene Summary:**

The protein encoded by this gene is a critical subunit of N-methyl-D-aspartate receptors, members of the glutamate receptor channel superfamily which are heteromeric protein complexes with multiple subunits arranged to form a ligand-gated ion channel. These subunits play a key role in the plasticity of synapses, which is believed to underlie memory and learning. Cell-specific factors are thought to control expression of different isoforms, possibly contributing to the functional diversity of the subunits. Alternatively spliced transcript variants have been described. [provided by RefSeq, Jul 2008]

## **Product images:**



Circular map for RC216458L2