

Product datasheet for RC223623

NMDAR2B (GRIN2B) (NM_000834) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NMDAR2B (GRIN2B) (NM_000834) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NMDAR2B
Synonyms:	DEE27; EIEE27; GluN2B; hNR3; MRD6; NMDAR2B; NR2B; NR3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN:	NM_000834
ORF Size:	4452 bp

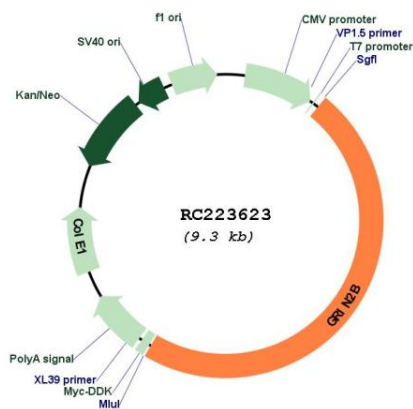


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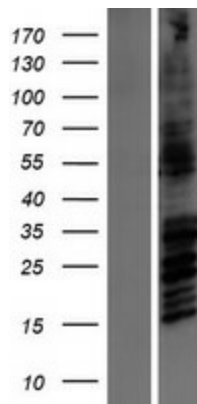
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000834.5
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]

Product images:


Circular map for RC223623



Western blot validation of overexpression lysate (Cat# [LY424499]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223623 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).