

Product datasheet for **RC211588**

NMDAR1 (GRIN1) (NM_021569) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NMDAR1 (GRIN1) (NM_021569) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NMDAR1
Synonyms:	GluN1; MRD8; NDHMSD; NDHMSR; NMD-R1; NMDA1; NMDAR1; NR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC211588 representing NM_021569
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGCACCATGCGCCTGCTGACGCTCGCCTGCTGTTCTCCTGCTCCGTCGCCCGTGCCGCGTGCGACC
 CCAAGATCGTCAACATTGGCGCGGTGCTGAGCACGCGGAAGCACGAGCAGATGTTCCGCGAGGCCGTGAA
 CCAGGCCAACAAGCGGCACGGCTCCTGGAAGATTCAGCTCAATGCCACCTCCGTCACGCACAAGCCCAAC
 GCCATCCAGATGGCTCTGTGGTGTGCGAGGACCTCATCTCCAGCCAGGTCTACGCCATCTAGTTAGCC
 ATCCACCTACCCCAACGACCATTCACTCCACCCTGTCTCCTACACAGCCGGCTTCTACCGCATACC
 CGTGTGGGGTACCACCCGATGTCCATCTACTCGGACAAGAGCATCCACCTGAGCTTCTGCGCACC
 GTGCCGCCCTACTCCACCAGTCCAGCGTGTGGTTTGGATGATGCGTGTCTACAGCTGGAACCACATCA
 TCCTGCTGGTCAAGGACGACCACGAGGGCCGGGCGCTCAGAAACGCCTGGAGACGCTGCTGGAGGAGCG
 TGAGTCCAAGGCAGAGAAGGTGTGCAGTTTACCAGGGACCAAGAAGCTGACGCCCTGCTGATGGAG
 GCGAAAGAGCTGGAGGCCGGGTATCATCTTTCTGCCAGCGAGGACGATGCTGCCACTGTATACCGCG
 CAGCCCGATGCTGAACATGACGGGCTCCGGGTACGTGTGGTGGTGGCGAGCGCGAGATCTCGGGGAA
 CGCCCTGCGCTACGCCCCAGACGGCATCCTCGGGTGCAGCTCATCAACGGCAAGAACGAGTCGGCCAC
 ATCAGCGACGCCGTGGCGTGGTGGCCAGGCCGTGCACGAGCTCCTCGAGAAGGAGAACATCACCGACC
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 TACAGCATCATGAACCTGCAGAACCGAAGCTGGTCAAGTGGGCATCTACAATGGCACCCACGTCATCC
 CTAATGACAGGAAGATCATCTGGCCAGGCGGAGAGACAGAGAAGCCTCGAGGGTACCAGATGTCCACCAG
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 AACACAGCAACAAGAAGGAGTGGAAATGGGATGATGGGCGAGTGTGCTCAGCGGCAGGCAGACATGATCG
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 CCTGACTATTCTGGTCAAGAAGGAGATCCCGGAGCACGCTGGACTCGTTCATGCACGCCGTTCCAGAGC
 AACTGTGGCTGTGGTGGGGTGTGGTGCACGTGGTGGCCGTGATGCTGTACCTGCTGGACCGCTTCA
 GCCCTTCGGCCGTTCAAGGTGAACAGCGAGGAGGAGGAGGAGGACGCACTGACCTGTCTCGGCCAT
 GTGGTTCTCCTGGGGCGTCTGCTCAACTCCGGCATCGGGGAAGGCGCCCCCAGAAGCTTCTCAGCGCGC
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 TCCTGGTGTGGACCGGCCGGAGGAGCGCATCACGGGCATCAACGACCCTCGGCTGAGGAACCCCTCGGA
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 AACGTCTCCCTGTCCATCCTCAAGTCCCACGAGAATGGCTTCATGGAAGACCTGGACAAGACGTGGGTTT
 GGTATCAGGAATGTGACTCGCGCAGCAACGCCCTGCGACCCCTACTTTTGAACAATGGCCGGGTCTT
 CATGCTGGTAGCTGGGGCATCGTGGCCGGATCTTCTGATTTTCATCGAGATTGCCTACAAGCGGCAC
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 GGAGGAGGCCAGCTGCAGCTGTGTTCCCGTCATAGGGAGAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211588 representing NM_021569
Red=Cloning site Green=Tags(s)

MSTMRLTLALLFSCSVARAACDPKIVNIGAVLSTRKHEQMFREAVNQANKRHGSKWIQLNATSVTHKPN
 AIQMALSVCEDLISSQVYAILVSHPTPNDFHTPTPVSYTAGFYRIPVLGLTTRMSIYSDKSIHLSFLRT
 VPPYSHQSSVWFEMMRVYSWNHIIILLVSDDEHGRAAQKRLLEERESKAQKVLQFDPGTKNVTALLME
 AKELARVVIILSASEDDAATVYRAAAMLNMTGSGYVWL VGEREISGNALRYAPDGLGLQLINGKNESA
 ISDAVGVVAQAVHELLEKENITDPPRGCVGNTNIWKTGPLFKRVLMSKYADGVTGRVEFNEDGDRKFAN
 YSIMNLQNRKLVQVGIYNGTHVIPNDRKIIWPGGETEKPRGYQMSTRLKIVTIHQEPFVYVKPTLSDGTC
 KEEFTVNGDPVKKVICTGPNDTSPGSPRHTVPQCCYGFCIDLLIKLARTMNFYEVHLVADGKFGTQERV
 NNSNKKEWNGMMGELLSGQADMIVAPLTINNERAQYIEFSKPFKYQGLTILVKKEIPRSTLDSFMQPFQS
 TLWLLVGLSVHVVAVMLYLLDRFSPFGRFKVNSEEEEDALTLSSAMWFSWGLLNSGIGEGAPRSFSAR
 ILMVMWAGFAMIIVASYANLAFLVDRPEERITGINDPRLRNPDKFIYATVKQSSVDIYFRQVELS
 TMYRHMEKHNYESAEEAIQAVRDNKLHAFIWDSAVLEFEASQKCDLVTTGELFFRSFGFGIMRKDSPWKQ
 NVSLSILKSHENGFMEDLTKTWVRYQECDSRSNAPATLTFENMAGVFMLVAGGIVAGIFLIFIEIAYKRH
 KDARRKQMLAF AAVNVWRKNLQSTGGGRGALQNQKDTVLPRAIEREEGQLQLCSRHRES

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

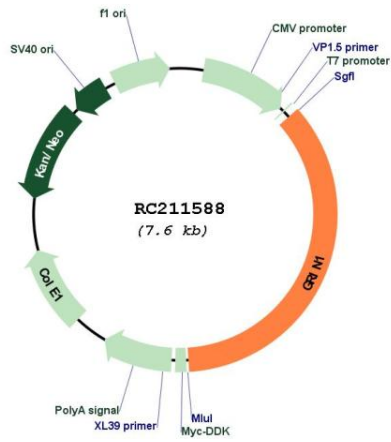
Cloning Scheme:



ACCN: NM_021569

ORF Size:	2703 bp
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.
RefSeq:	NM_021569.4
RefSeq Size:	4289 bp
RefSeq ORF:	2706 bp
Locus ID:	2902
UniProt ID:	Q05586
Cytogenetics:	9q34.3
Domains:	lig_chan, ANF_receptor
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:	101.2 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 RC211588