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Product datasheet for MC222512

Grin1 (NM_001177656) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grin1 (NM_001177656) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Grin1
Synonyms:	GluN1; GluRdelta1; GluRzeta1; M100174; NMD-R1; Nmdar; NMDAR1; NR1; Rgsc174
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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Fully Sequenced ORF:

>MC222512 representing NM_001177656
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCACCATGCACCTGCTGACATTCGCCCTGCTTTTCTCCTGCTCCTTCGCCCGCGCTGCCTGCGACC
CCAAGATTGTCAACATCGGCGCGGTGCTGAGCACGCGCAAGCACGAGCAGATGTTCCGCGAGGCAGTAAA
CCAGGCCAATAAGCGACACGGCTCTTGGAAGATACAGCTCAACGCCACTTCTGTCACCCACAAGCCCAAC
GCCATACAGATGGCCCTGTCAGTGTGTGAGGACCTCATCTCTAGCCAGGTCTACGCTATCCTAGTTAGTC
ACCCGCCTACTCCCAACGACCACTTCACTCCCACCCCTGTCTCCTACACAGCTGGCTTCTACAGAATCCC
CGTCCTGGGGCTGACTACCCGAATGTCCATCTACTCTGACAAGAGCATCCACCTGAGCTTCCTTCGCACC
GTACCACCCTACTCCCACCAGTCCAGCGTCTGGTTTGAGATGATGCGCGTCTACAACTGGAACCATATCA
TCCTGCTGGTCAGCGATGACCACGAGGGCCGGGCAGCGCAGAAGCGCCTGGAGACGTTGCTGGAGGAGCG
TGAGTCCAAGAGTAAAAAAAGGAACTATGAAAACCTCGACCAACTGTCCTATGACAACAAGCGCGGACCC
AAGGCAGAGAAGGTGCTGCAGTTTGACCCAGGAACCAAGAATGTGACGGCTCTGCTGATGGAAGCCCGGG
ACCTGGAAGCCCGGGTCATCATCCTTTCTGCAAGCGAGGACGACGCTGCCACCGTATACCGCGCAGCCGC
GATGCTGAACATGACTGGCTCTGGGTACGTGTGGCTCGTCGGGGAGCGCGAGATCTCTGGGAATGCCCTG
CGCTACGCTCCTGACGGCATCATCGGACTTCAGCTAATCAACGGCAAGAACGAGTCGGCCCACATCAGTG
ACGCTGTGGGCGTGGTGGCACAGGCAGTCCACGAGCTCCTAGAAAAGGAGAACATCACTGATCCACCGCG
GGGTTGCGTGGGCAACACCAACATCTGGAAGACAGGACCACTGTTCAAGAGGGTGCTGATGTCTTCCAAG
TATGCAGATGGAGTGACTGGCCGTGTGGAATTCAATGAGGATGGGGACCGGAAGTTTGCCAACTATAGTA
TCATGAACCTGCAGAACCGCAAGCTGGTGCAAGTGGGCATCTACAATGGTACCCATGTCATCCCAAATGA
CAGGAAGATCATCTGGCCAGGAGGAGAGACAGAGAAGCCTCGAGGATACCAGATGTCCACCAGACTAAAG
ATAGTGACAATCCACCAAGAACCCTTCGTGTATGTCAAGCCCACAATGAGTGATGGCACATGCAAAGAGG
AGTTCACAGTCAATGGTGACCCTGTCAAGAAGGTGATCTGTACGGGGCCTAATGACACATCCCCAGGAAG
CCCACGTCACACAGTGCCCCAGTGCTGTTATGGCTTCTGCGTTGACCTGCTCATCAAGCTGGCACGGACC
ATGAATTTTACCTACGAGGTGCACCTTGTGGCAGATGGCAAGTTTGGCACACAGGAGCGGGTAAACAACA
GCAACAAAAAGGAGTGGAACGGAATGATGGGAGAGCTGCTCAGTGGTCAAGCAGACATGATCGTGGCTCC
ACTGACCATTAACAATGAGCGTGCGCAGTACATAGAGTTCTCCAAGCCCTTCAAGTACCAGGGCCTGACC
ATTCTGGTCAAGAAGGAGATCCCTCGGAGCACACTGGACTCATTCATGCAGCCCTTTCAGAGCACACTGT
GGCTGCTGGTGGGGCTGTCAGTTCATGTGGTGGCCGTGATGCTGTACCTGCTGGACCGCTTCAGTCCCTT
TGGCCGATTTAAGGTGAACAGCGAGGAGGAGGAGGAGGATGCACTGACCCTGTCCTCTGCCATGTGGTTT
TCCTGGGGCGTCCTGCTCAACTCTGGCATTGGGGAAGGTGCCCCCCGGAGTTTCTCTGCTCGTATCCTAG
GCATGGTGTGGGCTGGTTTTGCCATGATCATCGTGGCTTCCTACACTGCCAACCTGGCAGCCTTCCTGGT
GCTGGATAGGCCTGAGGAGCGCATCACAGGCATCAATGACCCCAGGCTCAGAAACCCCTCAGACAAGTTC
ATCTATGCAACTGTAAAACAGAGCTCTGTGGATATCTACTTCCGGAGGCAGGTGGAGTTGAGCACCATGT
ACCGGCACATGGAGAAGCACAATTATGAGAGTGCAGCTGAGGCCATCCAGGCTGTGCGGGACAACAAGCT
CCATGCCTTCATCTGGGACTCAGCTGTGCTGGAGTTTGAGGCTTCACAGAAGTGCGATCTGGTGACCACG
GGTGAGCTGTTCTTCCGCTCCGGCTTTGGCATCGGCATGCGCAAGGACAGCCCCTGGAAGCAAAATGTGT
CCCTGTCCATACTCAAGTCCCATGAGAATGGCTTCATGGAAGACCTGGATAAGACATGGGTTCGGTATCA
AGAATGTGACTCCCGCAGCAATGCCCCTGCCACCCTCACTTTTGAGAACATGGCAGGGGTCTTCATGCTG
GTGGCTGGAGGCATCGTAGCTGGGATCTTCCTCATTTTCATCGAGATCGCCTACAAGCGACACAAGGATG
CCCGTAGGAAGCAGATGCAGCTGGCTTTTGCAGCCGTGAACGTGTGGAGGAAGAACCTGCAGCAGTACCA
TCCCACTGATATCACGGGCCCGCTCAACCTCTCAGATCCCTCGGTCAGCACCGTGGTGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001177656

Insert Size:	2721 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 custsupport@origene.com 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. More info
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:	NM_001177656.2, NP_001171127.1
RefSeq Size:	3922 bp
RefSeq ORF:	2721 bp
Locus ID:	14810
UniProt ID:	P35438
Cytogenetics:	2 17.14 cM
Gene Summary:	Component of NMDA receptor complexes that function as heterotetrameric, ligand-gated ion channels with high calcium permeability and voltage-dependent sensitivity to magnesium. Channel activation requires binding of the neurotransmitter glutamate to the epsilon subunit, glycine binding to the zeta subunit, plus membrane depolarization to eliminate channel inhibition by Mg(2+) (PubMed:1532151, PubMed:8060614, PubMed:12008020). Sensitivity to glutamate and channel kinetics depend on the subunit composition (PubMed:12008020). [UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) contains an additional in-frame exon in the 5' coding region, and lacks an exon and contains an alternate 3' terminal exon, resulting in an alternate 3' coding region, compared to variant 1. The encoded isoform (2) has distinct C-terminus and is shorter than isoform 1.