

Product datasheet for **MC224232**

Grin2d (NM_008172) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Grin2d (NM_008172) Mouse Untagged Clone
Tag: Tag Free
Symbol: Grin2d
Synonyms: GluN2D; NMDAR2D; NR2D
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224232 representing NM_008172
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGC**

ATGCGCGCGCCGGTGGCCCCGCGGCCCTCGGGGCCCGCTAAGATGCTGTTGCTGCTGGCGTGGCGT
GCGCCAGCCCGTCCCGGAGGAGGTGCCGGGGCCGGGCGGCCGGCGGGGACGGGCGGGCGCGGCC
GCTCAAGTGGCGCTGGTCTTCTGGCCCGGCGTACGCGGCCGAGGCGGCGCGCTTGGGCCCGCCGTG
GCGGCGCAGTGCAGCCCGGCCCTGGACGTACGCGCCCGTGGCGCTGGTGTCAACGGCTCCGACCCTC
GCAGCCTTGTGCTGCAGCTCTGCGACCTGCTGTGCGGGCTGCGCGTGCACGGCGTGGTGTTCGAGGACGA
CTCGCGCGCGCCCGCCGCTCGCGCCATTCTCGACTTCTGTGCGCGCAGACCTCGCTGCCCATCGTGGCC
GTGCACGGCGCGCCCGCTCGTACTCACCCAAGGAGAAGGGCTCCACCTTCTGCAGCTTGGCTCCT
CCACAGAGCAACAGCTGCAGGTCATTTTTGAGGTGCTGGAGGAGTACGACTGGACATCCTTTGTGGCAGT
GACTACGCGTGGCCAGGCCATCGAGCCTTCTGTGCATACATCGAGGTGCTGACTGATGGCAGCCTGGTG
GGTGGGAGCATCGAGGAGCGCTGACACTGGACCCGGAGCGGGTGGGCGCTCCTGGCGCACAGCTCC
GTAGTGTCAAGTGCAGATCCGCTGCTTCTGCGCCCGGAGGAGGAGCAGCCTGTTTTCCGGCGCGCC
AGAAGAGGCTGGTCTCACTGGGCTGGCTACGTCTGGTTCATGGTGGGACCTCAGCTGGCCGGAGGTGGG
GGCTCCGGGGTCCCTGGGAACCACTTCTTCTGCCAGGAGGTGCCCACTGCCTGCTGGGCTGTTTGCAG
TGCGCTCTGCTGGCTGGCGTGCAGACTTGGCACGTCGAGTGGCTGCTGGTGTGGCGGTGGTGGCCAGAGG
TGCCAGGCCCTGCTGCGAGACTATGGCTTCTGCCTGAGCTGGGCCATGACTGTGCGCGCCAGAATCGC
ACCCACCGCGGGAGAGTCTGCACAGGTATTTTCATGAACATCACCTGGGATAACCGAGACTACTCCTTCA
ATGAGGATGGCTTTCTGGTAACCCGCTCACTGGTAGTCATCTCCCTACCAGAGACAGGACGTGGGAAGT
GGTGGGAGCTGGGAACAGCAGACCCTCCGCTCAAGTACCCTCTATGGTCCCGCTATGGCCGCTTCTG
CAGCCGTTGGATGACACGCAGCACCTCACTGTGGCCACGCTGGAGGAGAGACCTTTTGTGATTGTAGAGC
CTGCAGACCCATCAGCGGCACTTGCATCAGAGACTCGGTTCCCTGCCGGAGCCAGCTCAACCGTACCCA
CAGCCCTCCGCTGACGCTCCCCGCGGGAGAAGAGATGCTGCAAGGGTTTCTGCATTGACATTTTGAAG
AGGCTGGCGCACACCATCGGTTTCAGCTATGACCTCTACCTGGTTACCAACGGCAAGCATGGCAAGAAGA



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TCGATGGCGTCTGGAATGGCATGATTGGTGAGGTGTTCTATCAGCGTGCGGACATGGCCATCGGCTCCCT
CACCATCAATGAGGAGCGGTACAGAGATCGTGGACTTCTCCGTCCTTTTGTAGAGACAGGCATCAGCGTC
ATGGTGGCAGCGACAAATGGCACTGTGTCCCTCTGCCTTCTCGAGCCCTACAGCCCCGTGTGTGGG
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GGGCTATAACCGAAGCCTGGCCACGGGCAAACGCCCGGAGGCTCTACCTTACCATTGGGAAATCCATC
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TCATGGTGTGGTGTGGCCCTTCTTTGCCGTCACTTTTCTTCCAGCTATACAGCCAATCTGGTGCCTT
CATGATCCAGGAGGAGTACGTGGACACCGTGTCTGGGCTCAGCGACCGGAAGTTCCAGCGGCCCCAGGAG
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ACCTTGTGTACTGGCGACTGCGGCACTGTCTGGGGCCACCACCGCATGGATTTCTACTGGCCTTCTC
CAGGGGTATGTACAGCTGCTGCAGCGCTGAGGCTGCTCCGCCCGCGGCCAAACCCCGCCACCGCCGAG
CCGCTGCCAGTCCGGGTATCCCGCCGCTCGCCACCCTGGCCCCGACCCCTTGTGCCCGGAGAGC
GCGCAGCCGCGACCGCTGGCGCCGGGCAAGGGCACAGGGCCCCCGGGGGCGCAGCGCTAGCCGACGG
CTTCCACCGATACTACGGCCCATCGAGCCGACAGGGCTGGGCCCTCGGCGAGGCGCGCCGCGCACCGAGA
GGCGCAGCCGGACGCCACTGTCCCAACCCACACAGCCCCACAGAAGCCACCACCTTCTACTTTCG
CCATCGTGCAGCAAGAGCCGGCCGAGCCCCCGCGCGCCTTCCCGGGCTTCCCATCTCCGCCCGC
TCCGCTGCCCGCGCAGCCGCGCCTCGGGCCGACACTGTGCCGCTGGCTTTCGAGGACGAGAGCCCG
CCCGCGCCTCGCGCTGGCCGCTTCTGACCCCGAGAGCCAGCCGCTGTTGGGTGGGGGGCGGGCGGCC
CGAGCGCTGGGGCCCGACCGCACCCGCCCGCGCCGCGCCACCACCGTGCCTACCTGGACCT
CGAGCCTTCGCTTCGGACTCCGAGGATTCCGAGAGCCTGGGCGGAGCGTCTCGTGGTGGCTGGAGCC
TGGTGGTTCGCGACTTCCCTACCCGATGCGGAGCGCTCGGGCCCGCCCGCGGCTACTGGTCCG
TTGACAAGCTCGGGGCTGGCGCGCTGGTAGCTGGGACTACCTGCCCGCGCGGCGGCCCGCATGGCA
CTGCCGCACTGCGCCAGCTGGAGTGTACCACCACCGCCATCTCAGTGTCTGCACGACGGCCTA
GACGGTGGTGGTGGGCGCTCCGCTCACCTGGGCTGCGGGGCCACCGCCCCGCGCGGGCGCGCT
GTGGTGTCCGCGACCGCACCCGACCCCGGGCTTCGCACCGTGCGCCCGCGCCGACCGCACCA
CCACCGACACAGGCGCGCGGGTGGCTGGGACTCCCGCCCGCGCGCCACCTCGCTTTCGCTGGAG
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GTCCGACGCTGCGCATTGGGGCCGCCCTGCCACCAGCATCTACCGGAGACACCGGGGCGGGGACCT
GGGCACACGAGGGGCTCTGCGCACTTCTCAGCCTGGAGTCCGAGGTATGA
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AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA
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- Restriction Sites:** SgfI-RsrII
- ACCN:** NM_008172
- Insert Size:** 3972 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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_008172.2](#), [NP_032198.2](#)

RefSeq Size: 4383 bp

RefSeq ORF: 3972 bp

Locus ID: 14814

UniProt ID: [Q03391](#)

Cytogenetics: 7 29.54 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:1385220). Sensitivity to glutamate and channel kinetics depend on the subunit composition (Probable).[UniProtKB/Swiss-Prot Function]