

Product datasheet for **RR217494**

Grin3a (NM_138546) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grin3a (NM_138546) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Grin3a
Synonyms:	chi-1; GluN3A; NR3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR217494 representing NM_138546 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGAGACTGAGTTTGTGGTGGCTGCTGAGCAGGGTCTGTCTGCTGCTGCCGCCGCCCTGCGCACTGG
TGCTGGCCGGGGTGCCAGCTCCTCCTCGCACCCGCAACCCTGCCAGATCCTCAAGCGCATCGGACACGC
GGTGAGGGTGGGCGGGTGCACCTTGCAACCCTGGACCACGGCCCCACGCGCAGCCAGTCGCGCTCAGGAA
GGCGGCAGGGCGGGTGCCAGAGGGATGATCCAGAGTCCGGGACGTGGCGGCCACCGCGCCCTCGCAAG
GCGCACGCTGGTTGGGGAGCGCCCTGCATGGCCGGGGTCCACCCGGCTCCCGAAAGCTCGGGGAGGGCGC
GGGGGCCGAGACCCTGTGGCCGCGGGATGCCCTACTGTTGCTGTGGAAAATTGAACCGTGTGGAAGGG
CTCCTACCCTACAACCTGTCTTTGGAAGTAGTGATGGCCATTGAGGCGGGCTGGGCGATCTGCCGCTTA
TGCCCTTCTTCCCAAGCTCACCGTGGAGCAGTGACCCTTTCTCTTTCTGCAGAGCGTGTGCCACAC
CGTAGTGGTACAAGGGGTGTCGGCGCTGCTGGCCTTCCCCAGAGCCAGGGCGAAATGATGGAGCTGGAC
TTGGTCAGCTCTGTCTGCACATCCCAGTGTCTCAGCATAGTGCGCCACGAGTTTCCGCGGGAGAGCTCAGA
ATCCCCTGACCTACAGCTGAGTTTAGAAAATCACTAAGTTCTGATGCTGATGCTCAATCCT
GACCATGAACAAGTGGTACAATTTTAGCTTGTGCTCTGCCAGGAAGACTGGAATATCACGGACTTCCTC
CTCCTTACGGAGAATAACTCCAAGTTCCACCTCGAGTCTGTTATCAACATCACTGCTAATCTGCTCTCCA
CAAAGGACCTTCTAAGTTTCTGCAAGTCCAGATGGACAACATTAGGAACAGCACACCCACAATGGTGAT
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GAACCTCACTGGGTTTTAGGAGACTCCCAGAATGTGGAGAACTGAGGACAGAAGGCCTGCCCTTAGGGC
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ACTTGAGAGTGGTGACATTGATTGAACCCCATTTGTTTTACGAGAGAAGTAGACGATGAAGGCTTATG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RR217494 representing NM_138546
 Red=Cloning site Green=Tags(s)

MRRLSLWWLLSRVCLLLPPPCALVLAGVPSSSSHPQCQILKRIGHAVRVGAVHLQPWTTAPRAASRAQE
 GGRAGAQRDDPESGTWRPPAPSQGARWLSALHGRGPPGSRKLGEGAGAE TLWPRDALLFAVENLNRVEG
 LLPYNLSLEVMAIEAGLDLPLMPFSSPSSPSSDPFSLQSVCHTVVQVQSALLAFPQSQGEMMELD
 LVSSVLHIPVLSIVRHEFPRESQNP LHLQLSLENSLSSDADVTVSILTMNNWYNFSLLLCQEDWNI TDFL
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 ELHWVLGDSQNVHEELRTEGLPLGLIAHGKTTQSVFEYVYQDAMELVARAVATATMIQPELALLPSTMNMC
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 MDSGIWPEQAQRHKT HFQHPNKLHLRVVTLIEHPFVFTREVDDEGLCPAGQLCLDPMTNDSMLDRL FSS
 LHSSNDTVPIKFKKCCYGYCIDLLEQLAEDMNFDFLYIVGDGKYGAWKNGHWTLVGDLLSGTANMAVT
 SFSINTARSQVIDFTSPFFSTSLGILVRTRD AAPIGAFMWPLHWTMWLGIFVALHITAI FLTLYEWKSP
 FGMPKGRNRNKVFSFSSALNVCYALLFGRTAAIKPPKWTGRFLMNLWAI FCMFCLSTYTANLAAVMVG
 EK IYEELSGIHDPKLHHP SQGFRFGTVRESSAEDYVRQSFPEMHEYMRRYNVPATPDGVQYLKNDPEKLD
 AFIMDKALLDYEVSIDACKLLTVGKPF AIEGYIGLPPNSPLT SNI SELISQYKSHGFMVDLHDKWYKV
 VPCGKRSFAVTETLQMGIKHFSGLFVLLCIGFGLSILTTIGEHI VHRLLLPRIKNKSKLQYWLHTSQRFH
 RALNTSFVEEKQPRSKTKRVEKSRWRRWTKTEGDSLSLFPNSNLGPQQLMVWNTSNL SHDNQRKYIFN
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 TELEEYQKTNRTCES

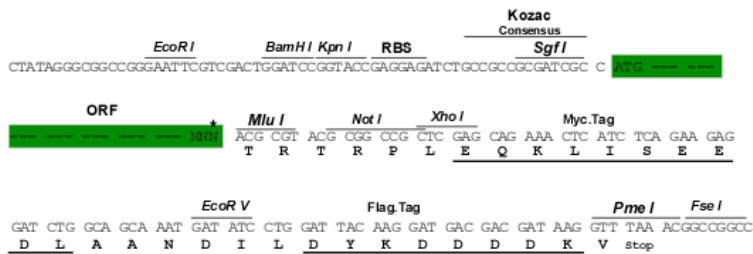
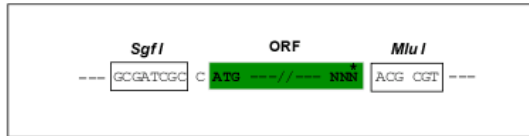
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

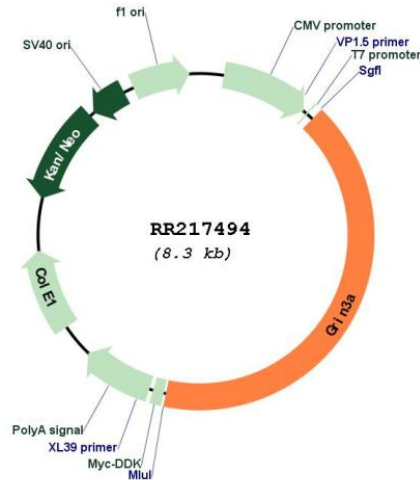
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_138546

ORF Size: 3405 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:

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_138546.2](#), [NP_612555.1](#)

RefSeq Size: 4386 bp

RefSeq ORF: 3408 bp

Locus ID: 191573

UniProt ID: [Q9R1M7](#)

Cytogenetics: 5q22

MW: 127.6 kDa

Gene Summary: glutamate receptor subunit involved in neuronal signaling [RGD, Feb 2006]