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Product datasheet for MR231614

Grin3a (NM_001276355) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Grin3a (NM_001276355) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Grin3a
Synonyms:	6430537F04; A830097C19Rik; mKIAA1973; NMDAR-L; NR3A
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR231614 representing NM_001276355 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGAGGAGACTGAGTTTGTGGTGGCTGCTGAGCAGGGTCTGTCTGTTGCTGCCTCCGCCCTGTGCACTGG TGCTGGCCGGGGTGCCCAGCTCCTCCTCGCACCCGCAACCCTGCCAGATCCTCAAGCGCATCGGACACGC GGTGAGGGTGGGCGCGGTGCACTTGCAACCCTGGACCACGGCCCCACGCGCAGCCAGTCGCGCTCAGGAC GGCGGCAGGGCGGGTGCCCAGAGGGATGAGCCAGAGTCGGGGACGTGGCGGCCACCGGCGCCCTCGCAAG GCGCACGTTGGTTGGGGAGCGCCCTGCATGGCCGGGGTCCACCCGGCTCCCGCAAGCTCGGGGAGGGCGC CGGGACCGAGACCCTGTGGCCGCGGGATGCCCTACTGTTCGCTGTGGAAAACCTGAACCGTGTGGAAGGG CTCCTTCCCTACAACCTGTCTTTGGAAGTAGTGATGGCCATCGAGGCGGGCCTGGGCGACCTGCCACTTA TGCCTTTCTCTTCCCCAAGCTCACCGTGGAGCAGTGACCCTTTCTCCTTTCTGCAGAGCGTGTGCCACAC CGTAGTGGTACAAGGGGTTTCAGCGCTGCTGGCCTTCCCCCAGAGCCAGGGCGAAATGATGGAGCTGGAC TTGGTCAGTTCTGTCCTGCACATCCCAGTGCTCAGCATAGTGCGCCACGAGTTTCCGCGGGAGAGTCAGA ATCCCCTGCACCTACAGCTGAGTTTAGAAAATTCACTAAGTTCTGATGCTGATGTCACTGTCTCAATCCT GACCATGAACAACTGGTACAATTTTAGCTTGTTGCTATGCCAGGAAGACTGGAATATCACCGACTTCCTA CTCCTTACAGAGAATAACTCCAAGTTCCACCTCGAGTCTATCATCAACATCACTGCTAACCTGTCCTCCA CAAAGGACCTTCTAAGTTTCCTGCAGGTCCAGCTGGAAAACATTAGGAACAGCACACCCACAATGGTGAT GTTTGGCTGTGACATGGGGAGCATCCGGCAGATATTTGAAATGTCCACACAGTTTGGGCTATCACCTCCT GATCTTCACTGGGTTTTAGGAGACTCACAGAATGTGGAGGAGCTGAGGACAGAAGGCCTGCCCTTAGGGC TCATTGCTCATGGAAAAACCACACAGTCTGTCTTTGAGTACTATGTTCAGGATGCCATGGAGTTGGTTGC AAGAGCTGTAGCCACAGCCACCATGATCCAGCCAGAACTTGCTCTCCTTCCCAGCACAATGAACTGCATG GATGTGAAAACCACAAATCTCACTTCTGGACAATATTTATCAAGGTTTTTAGCCAACACCACTTTCAGAG GTCTCAGTGGTTCCATCAAAGTAAAGGGATCCACCATCGTCAGCTCAGAAAACAACTTTTTCATCTGGAA CTTGCAGTATGACCCTATGGGAAAGCCAATGTGGACTCGCCTGGGTAGCTGGCAAGGGGGAAGGATTGTC ATGGACTCGGGAATATGGCCAGAGCAGGCCCAGAGGCACAAAACCCACTTCCATCACCCAAACAAGTTAC

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Protein Sequence:

>MR231614 representing NM_001276355
Red=Cloning site Green=Tags(s)

MRRLSLWWLLSRVCLLLPPPCALVLAGVPSSSSHPQPCQILKRIGHAVRVGAVHLQPWTTAPRAASRAQD
GGRAGAQRDEPESGTWRPPAPSQGARWLGSALHGRGPPGSRKLGEGAGTETLWPRDALLFAVENLNRVEG
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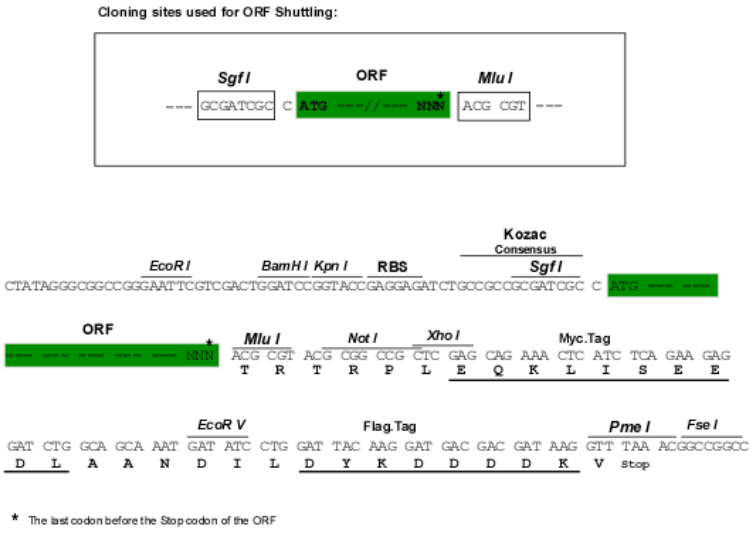
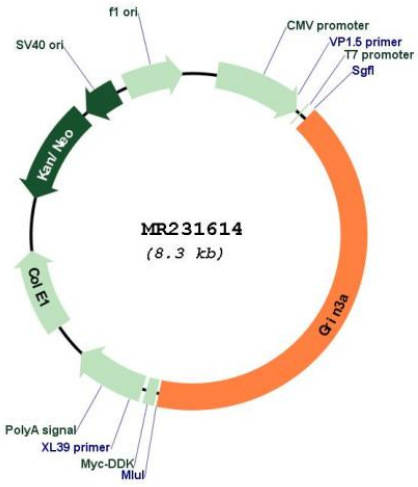
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001276355
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_001276355.1, NP_001263284.1
RefSeq Size:	7727 bp
RefSeq ORF:	3408 bp
Locus ID:	242443
UniProt ID:	A2AIR4
Cytogenetics:	4 B1

MW:	128 kDa
Gene Summary:	NMDA receptor subtype of glutamate-gated ion channels with reduced single-channel conductance, low calcium permeability and low voltage-dependent sensitivity to magnesium. Mediated by glycine. During the development of neural circuits, plays a role in the synaptic refinement period, restricting spine maturation and growth (By similarity). By competing with GIT1 interaction with ARHGEF7/beta-PIX, may reduce GIT1/ARHGEF7-regulated local activation of RAC1, hence affecting signaling and limiting the maturation and growth of inactive synapses (PubMed:24297929). May also play a role in PPP2CB-NMDAR mediated signaling mechanism (By similarity).[UniProtKB/Swiss-Prot Function]