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Product datasheet for MR227077L3V

Grin2b (NM_008171) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Grin2b (NM_008171) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Grin2b
Synonyms:	AW490526; GluN2B; Nmdar2b; NR2B
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_008171
ORF Size:	4446 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR227077).
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.
RefSeq:	NM_008171.3
RefSeq Size:	7515 bp
RefSeq ORF:	4449 bp
Locus ID:	14812
UniProt ID:	Q01097
Cytogenetics:	6 66.38 cM

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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:1377365, PubMed:26912815). Sensitivity to glutamate and channel kinetics depend on the subunit composition (PubMed:1377365). In concert with DAPK1 at extrasynaptic sites, acts as a central mediator for stroke damage. Its phosphorylation at Ser-1303 by DAPK1 enhances synaptic NMDA receptor channel activity inducing injurious Ca2+ influx through them, resulting in an irreversible neuronal death (PubMed:20141836). Contributes to neural pattern formation in the developing brain (PubMed:8789948). Plays a role in long-term depression (LTD) of hippocampus membrane currents and in synaptic plasticity (PubMed:8789948).[UniProtKB/Swiss-Prot Function]