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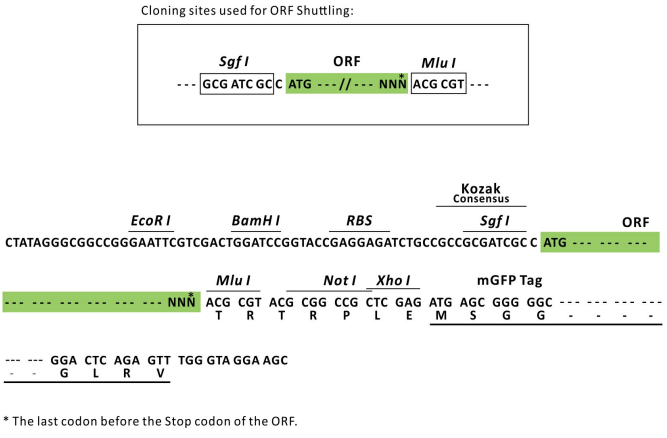
Product datasheet for MR227077L4

Grin2b (NM_008171) Mouse Tagged Lenti ORF Clone

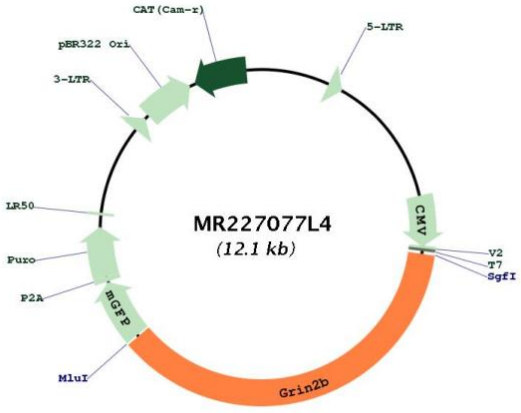
Product data:

Product Type:	Expression Plasmids
Product Name:	Grin2b (NM_008171) Mouse Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Grin2b
Synonyms:	AW490526; GluN2B; Nmdar2b; NR2B
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR227077).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	



View online »

Plasmid Map:



ACCN:	NM_008171
ORF Size:	4446 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_008171.3
RefSeq Size:	7515 bp
RefSeq ORF:	4449 bp

Locus ID:	14812
UniProt ID:	Q01097
Cytogenetics:	6 66.38 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: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]