ARG52352
anti-NMDAR1 antibody [R1JHL]

Package: 15 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [R1JHL] recognizes NMDAR1
Tested Reactivity	Ms, Rat
Tested Application	IP, WB
Host	Mouse
Clonality	Monoclonal
Clone	R1JHL
Isotype	IgG
Target Name	NMDAR1
Species	Rat
Immunogen	Fusion protein containing amino acids 1-564 of the NR1 subunit
Conjugation	Un-conjugated
Alternate Names	NMDA1; GluN1; MRD8; NMD-R1; Glutamate receptor ionotropic, NMDA 1; Glutamate [NMDA] receptor subunit zeta-1; N-methyl-D-aspartate receptor subunit NR1; NR1; NMDAR1

Application Instructions

Application Note	Specific for the ~120k NR1 subunit of the NMDA receptor. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

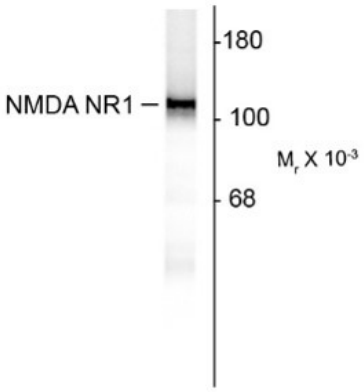
Form	Liquid
Purification	Culture supernatant
Buffer	PBS (pH 7.4), 137 mM NaCl, 7.5 mM Na2HPO4, 2.7 mM KCl and 1.5 mM KH2PO4.
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 14810 Mouse GeneID: 24408 Rat Swiss-port # P35438 Mouse

	Swiss-port # P35439 Rat
Gene Symbol	Grin1
Gene Full Name	glutamate receptor, ionotropic, N-methyl D-aspartate 1
Background	The protein encoded by this gene is a critical subunit of N-methyl-D-aspartate receptors, members of the glutamate receptor channel superfamily which are heteromeric protein complexes with multiple subunits arranged to form a ligand-gated ion channel. These subunits play a key role in the plasticity of synapses, which is believed to underlie memory and learning. Cell-specific factors are thought to control expression of different isoforms, possibly contributing to the functional diversity of the subunits. Alternatively spliced transcript variants have been described. [provided by RefSeq, Jul 2008]
Function	NMDA receptor subtype of glutamate-gated ion channels possesses high calcium permeability and voltage-dependent sensitivity to magnesium. Mediated by glycine. Plays a key role in synaptic plasticity, synaptogenesis, excitotoxicity, memory acquisition and learning. It mediates neuronal functions in glutamate neurotransmission. Is involved in the cell surface targeting of NMDA receptors. [UniProt]
Research Area	Neuroscience antibody
Calculated Mw	105 kDa
PTM	NMDA is probably regulated by C-terminal phosphorylation of an isoform of NR1 by PKC. Dephosphorylated on Ser-897 probably by protein phosphatase 2A (PPP2CB). Its phosphorylated state is influenced by the formation of the NMDAR-PPP2CB complex and the NMDAR channel activity.

Images



ARG52352 anti-NMDAR1 antibody [R1JHL] WB image

Western Blot: 10 ug of rat hippocampal (Hipp) lysate showing specific immunolabeling of the ~120k NR1 subunit of the NMDA receptor stained with ARG52352 NMDAR1 antibody [R1JHL]