

ARG52363 anti-NMDAR2B antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NMDAR2B
Tested Reactivity	Ms, Rat
Predict Reactivity	Hu
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NMDAR2B
Species	Rat
Immunogen	Fusion protein from the C-terminal region of the Rat NR2B subunit
Conjugation	Un-conjugated
Alternate Names	MRD6; Glutamate receptor ionotropic, NMDA 2B; hNR3; NR2B; EIEE27; GluN2B; N-methyl D-aspartate receptor subtype 2B; NR3; Glutamate [NMDA] receptor subunit epsilon-2; N-methyl-D-aspartate receptor subunit 3; NMDAR2B

Application Instructions

Application table	Application	Dilution
	WB	1:1000

Application Note Specific for the ~180k NR2B subunit of the NMDA receptor. Recognizes human, mouse and Rat forms of the NR2B subunits of NMDAR. Immunolabeling is blocked by preadsorption of antibody with the fusion protein used to generate the antibody. No reactivity towards the NR2A and NR2C subunits.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

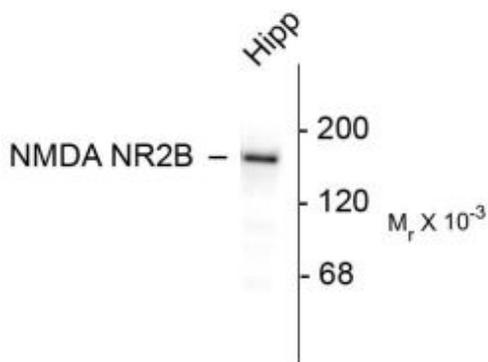
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% Glycerol
Stabilizer	100 µg BSA per ml, 50% Glycerol
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. 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.

Bioinformatics

Database links	GeneID: 14812 Mouse GeneID: 24410 Rat Swiss-port # Q00960 Rat Swiss-port # Q01097 Mouse
Gene Symbol	GRIN2B
Gene Full Name	glutamate receptor, ionotropic, N-methyl D-aspartate 2B
Background	The ion channels activated by glutamate that are sensitive to N-methyl-D-aspartate (NMDA) are designated NMDA receptors (NMDAR). The NMDAR plays an essential role in memory, neuronal development and it has also been implicated in several disorders of the central nervous system including Alzheimer's, epilepsy and ischemic neuronal cell death (Grosshans et al., 2002; Wenthold et al., 2003; Carroll and Zukin, 2002). The NMDA receptor is also one of the principal molecular targets for alcohol in the CNS (Lovinger et al., 1989; Alvestad et al., 2003; Snell et al., 1996). The rat NMDAR1 (NR1) was the first subunit of the NMDAR to be cloned and it can form NMDA activated channels when expressed in <i>Xenopus</i> oocytes but the currents in such channels are much smaller than those seen in situ. Channels with more physiological characteristics are produced when the NR1 subunit is combined with one or more of the NMDAR2 (NR2 A-D) subunits. Overexpression of the NR2B-subunit of the NMDA receptor has been associated with increases in learning and memory while aged, memory impaired animals have deficiencies in NR2B expression (Clayton et al., 2002a; Clayton et al., 2002b). The NMDAR is also potentiated by protein phosphorylation (Lu et al., 1999).
Highlight	Related Antibody Duos and Panels: ARG30131 Postsynaptic Receptor Antibody Panel (NMDAR2A, NMDAR2B, GluR1) Related products: NMDAR2B antibodies ; NMDAR2B Duos / Panels ; Anti-Rabbit IgG secondary antibodies ;
Research Area	Neuroscience antibody; Postsynaptic Receptor antibody
Calculated Mw	166 kDa
PTM	Phosphorylation at Ser-1303 by DAPK1 enhances synaptic NMDA receptor channel activity.

Images



ARG52363 anti-NMDAR2B antibody WB image

Western blot: 10 µg of Rat hippocampal (Hipp) lysate stained with ARG52363 anti-NMDAR2B antibody showing specific immunolabeling of the ~180 kDa NR2B subunit of the NMDA receptor.