

ARG52369 anti-NMDAR2B phospho (Tyr1472) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NMDAR2B phospho (Tyr1472)
Tested Reactivity	Rat
Predict Reactivity	Hu, Ms, Bov, Chk, Dog, NHuPrm, Zfsh
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NMDAR2B
Species	Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Tyr1472 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	MRD6; EIEE27; NR2B; hNR3; GluN2B; NR3; N-methyl D-aspartate receptor subtype 2B; Glutamate receptor ionotropic, NMDA 2B; Glutamate [NMDA] receptor subunit epsilon-2; N-methyl-D-aspartate receptor subunit 3; NMDAR2B

Application Instructions

Application table	<table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>WB</td><td>1:1000</td></tr> </table>	Application	Dilution	WB	1:1000
Application	Dilution				
WB	1:1000				
Application Note	<p>Specific for the ~180k NMDAR NR2B-subunit protein phosphorylated at Tyr1472 in Western blots. The antibody also labels proteins of ~65k and ~115k. Immunolabeling is completely blocked by blocked by either λ-Ptase or by the phosphopeptide used as the antigen but not by the corresponding dephosphopeptide.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>				

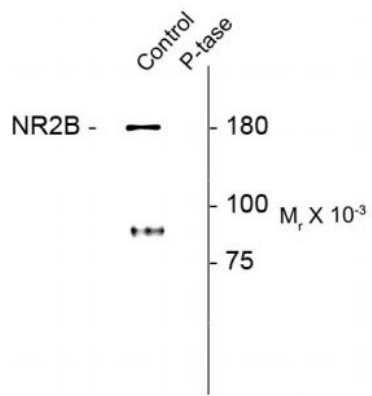
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 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.

Bioinformation

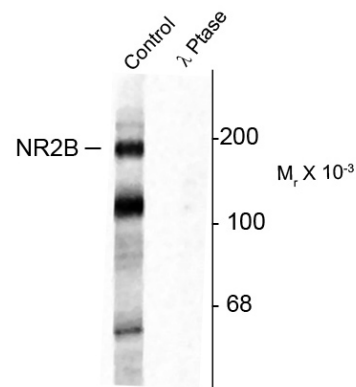
Database links	GeneID: 24410 Rat Swiss-port # Q00960 Rat
Gene Symbol	GRIN2B
Gene Full Name	glutamate receptor, ionotropic, N-methyl D-aspartate 2B
Background	The ion channels activated by glutamate that are sensitive to N-methyl-Daspartate (NMDA) are designated NMDA receptors (NMDAR). The NMDAR plays 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). Channels with physiological characteristics are produced when the NR1 subunit is combined with one or more of the NMDAR2 (NR2 A-D) subunits (Ishii et al., 1993). 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). Recent work suggests that phosphorylation of Tyr1472 on NR2B may regulate the functional expression the receptor in LTP and other forms of plasticity (Nakazawa et al., 2001; Roche et al., 2001).
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



ARG52369 anti-NMDAR2B phospho (Tyr1472) antibody WB image

Western blot: Rat hippocampal lysate stained with ARG52369 anti-NMDAR2B phospho (Tyr1472) antibody showing specific immunolabeling of the ~180k NR2B subunit of the NMDAR phosphorylated at Tyr1472 (Control). Immunolabeling is blocked by treatment of the lysate with lambda phosphatase.



ARG52369 anti-NMDAR2B phospho (Tyr1472) antibody WB image

Western blot: Rat hippocampal lysate showing specific immunolabeling of the ~180k NR2B subunit of the NMDAR phosphorylated at Tyr1472 (Control) stained with ARG52369 anti-NMDAR2B phospho (Tyr1472) antibody.