

ARG52370 anti-NMDAR2B phospho (Ser1480) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NMDAR2B phospho (Ser1480)
Tested Reactivity	Rat
Predict Reactivity	Hu, Ms, Bov, Chk, Dog, NHuPrm, Xenopus laevis
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NMDAR2B
Species	Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser1480 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

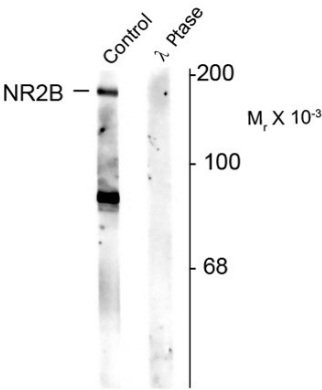
Application table	Application	Dilution
	WB	1:1000
Application Note	<p>Specific for ~180k NMDAR NR2B subunit protein phosphorylated at Ser1480. Immunolabeling of the NMDA NR2B subunit band is blocked by the phosphopeptide used as the antigen but not by the corresponding dephosphopeptide. Immunolabeling is also blocked by λ-phosphatase treatment.</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.
Note	For laboratory research only, not for drug, diagnostic or other use.

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 NMDA receptor (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 rat NMDAR1 (NR1) was the first subunit of the NMDAR to be cloned. The NR1 protein can form NMDA activated channels when expressed in Xenopus 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 (Ishii et al., 1993). It has been shown that phosphorylation of Ser1480 disrupts the interaction of NR2B with the PDZ domains of PSD-95 and SAP102 and decreases surface NR2B expression in neurons (Chung et al., 2004).
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



ARG52370 anti-NMDAR2B phospho (Ser1480) antibody WB image

Western blot: Rat hippocampal lysate showing specific immunolabeling of the ~180 kDa NR2B subunit of the NMDAR phosphorylated at Ser1480 (Control) stained with ARG52370 anti-NMDAR2B phospho (Ser1480) antibody. The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: lambda-Ptase). The blot is identical to the control except that it was incubated in lambda-Ptase (1200 units for 30 min) before being exposed to the phospho-Ser1480 NMDA NR2B subunit antibody. The immunolabeling is completely eliminated by treatment with lambda-Ptase.