ARG52367
anti-NMDAR2B phospho (Tyr1252) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NMDAR2B phospho (Tyr1252)
Tested Reactivity	Rat
Predict Reactivity	Hu, Ms, Bov, Chk, Dog, NHuPrm, Zfsh
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NMDAR2B
Species	Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Tyr1252 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
IHC-P	1:400
WB	1:1000

Application Note

Specific for ~180k NMDAR NR2B subunit protein phosphorylated at Tyr1252. 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. The antibody may also show some slight reactivity with Tyr1246 of NR2A.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

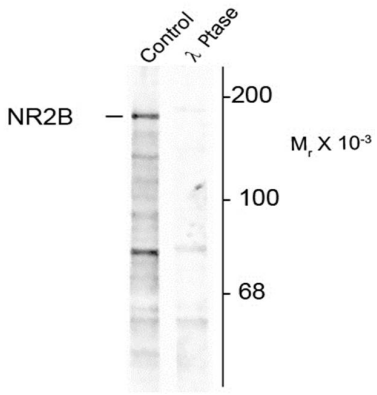
Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage 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.

Bioinformation

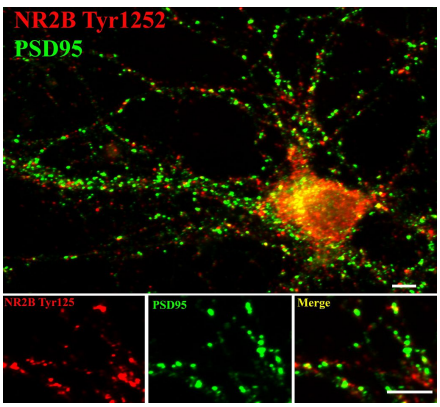
Database links	GeneID: 24410 Rat Swiss-port # Q00960 Rat
Gene Symbol	GRIN2B
Gene Full Name	glutamate receptor, ionotropic, N-methyl D-aspartate 2B
Background	The NMDA receptor (NMDAR) plays an essential role in memory, neuronal development and it has also been implicated in several disorders of the central 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). Phosphorylation of Tyr1252 is thought to potentiate NMDA receptordependent influx of calcium (Takasu et al., 2002).
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



ARG52367 anti-NMDAR2B phospho (Tyr1252) antibody WB image

Western blot: Detection of NMDA NR2B protein in Rat hippocampal lysate (showing secificity, lane 1) and lambda-phosphatase incubated Rat hippocampal lysate (negative control, lane 2) stained with ARG52367 anti-NMDAR2B phospho (Tyr1252) antibody.



ARG52367 anti-NMDAR2B phospho (Tyr1252) antibody ICC/IF image

Immunofluorescence: 14 DIV Rat cortical neurons stained with ARG52367 anti-NMDAR2B phospho (Tyr1252) antibody showing NR2B phosphorylated at Tyr 1252 in red and PSD95 in green.