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Phospho-Ser1480 NMDA Receptor NR2B Subunit Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1127

Specification

Phospho-Ser1480 NMDA Receptor NR2B Subunit Antibody - Product Information

Application	**WB**
Primary Accession	Q00960
Reactivity	**Rat**
Predicted	**Bovine, Chicken, Human, Mouse, Monkey, Xenopus**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**180 KDa**

Phospho-Ser1480 NMDA Receptor NR2B Subunit Antibody - Additional Information

Gene ID	**24410**
Gene Name	**GRIN2B**

Other Names
Glutamate receptor ionotropic, NMDA 2B, GluN2B, Glutamate [NMDA] receptor subunit epsilon-2, N-methyl D-aspartate receptor subtype 2B, NMDAR2B, NR2B, Grin2b

Target/Specificity
Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser1480 conjugated to KLH.

Dilution
WB~~ 1:1000

Format
Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

Antibody Specificity
Specific for ~180k NMDAR NR2B subunit protein phosphorylated atSer1480. Immunolabeling of the NMDA NR2B subunit band is blocked by the phosphopeptideused as the antigen but not by the corresponding dephosphopeptide. Immunolabeling is alsoblocked by λ-phosphatase treatment.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Phospho-Ser1480 NMDA Receptor NR2B Subunit Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

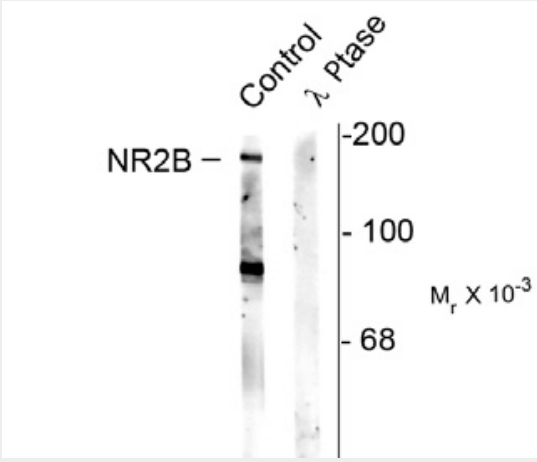
Shipping
Blue Ice

Phospho-Ser1480 NMDA Receptor NR2B Subunit Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-Ser1480 NMDA Receptor NR2B Subunit Antibody - Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the ~180k NR2B subunit of the NMDAR phosphorylated at Ser1480 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: λ-Ptase). The blot is identical to the control except that it was incubated in λ-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 λ-Ptase.

Phospho-Ser1480 NMDA Receptor NR2B Subunit Antibody - 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).

Phospho-Ser1480 NMDA Receptor NR2B Subunit Antibody - References

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plasticity. Trends Neurosci 25:571-577.
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Ishii T, Moriyoshi K, Sugihara H, Sakurada K, Kadotani H, Yokoi M, Akazawa C, Shigemoto R, Mizuno N, Masu M,
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