10320 Camino Santa Fe, Suite G
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NMDA Receptor, NR2B Subunit Antibody

Affinity purified rabbit polyclonal antibody
Catalog # AN1056

Specification

NMDA Receptor, NR2B Subunit Antibody - Product Information

Application	**WB**
Primary Accession	Q00960
Reactivity	**Human, Rat**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**180 KDa**

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
Fusion protein from the C-terminal region of the NR2B subunit.

Dilution
WB~~ 1:1000

Format
Prepared from rabbit serum by affinity purification using a column to which the fusion protein immunogen was coupled.

Antibody Specificity
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 pre-adsorption of antibody with the fusion protein used to generate the antibody. No reactivity towards the NR2A and NR2C subunits.

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
NMDA Receptor, NR2B Subunit Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

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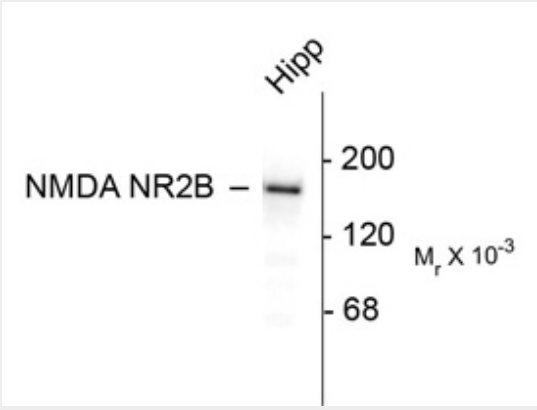
NMDA Receptor, NR2B Subunit Antibody - Protocols

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

NMDA Receptor, NR2B Subunit Antibody - Images



Western blot of 10 ug of rat hippocampal (Hipp) lysate showing specific immunolabeling of the ~180k NR2B subunit of the NMDA receptor.

NMDA Receptor, NR2B Subunit Antibody - 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 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. 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).

NMDA Receptor, NR2B Subunit Antibody - References

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