

Anti-NMDA NR2B Subunit (Tyr1472) Antibody

Our Anti-NMDA NR2B Subunit (Tyr1472) rabbit polyclonal phosphospecific primary antibody from Phospho
Catalog # AN1491

Specification**Anti-NMDA NR2B Subunit (Tyr1472) Antibody - Product Information**

Primary Accession	Q00960
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	166071

Anti-NMDA NR2B Subunit (Tyr1472) Antibody - Additional Information

Gene ID **24410**

Other Names

EPND antibody, FESD antibody, GluN2A antibody, Glutamate [NMDA] receptor subunit epsilon-1 antibody, Glutamate receptor antibody, Glutamate receptor ionotropic N methyl D aspartate 2A antibody, GRIN 2A antibody, GRIN2A antibody, hNR2A antibody, LKS antibody, N methyl D aspartate receptor channel subunit epsilon 1 antibody, N Methyl D Aspartate Receptor Subtype 2A antibody, N methyl D aspartate receptor subunit 2A antibody, N-methyl D-aspartate receptor subtype 2A antibody, NMDA receptor subtype 2A antibody, NMDAR 2A antibody, NMDAR2A antibody, NMDE1_HUMAN antibody, NR2A antibody, OTTHUMP00000160135 antibody, OTTHUMP00000174531 antibody

Target/Specificity

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 Tyr-1472 on NR2B may regulate the functional expression the receptor in LTP and other forms of plasticity (Nakazawa et al., 2001; Roche et al., 2001).

Format

Antigen Affinity Purified from Pooled Serum

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

Anti-NMDA NR2B Subunit (Tyr1472) Antibody is for research use only and not for use in diagnostic

or therapeutic procedures.

Shipping

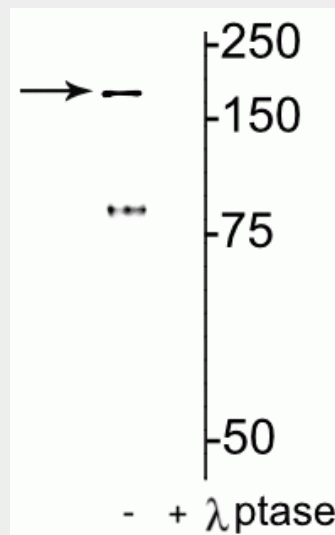
Blue Ice

Anti-NMDA NR2B Subunit (Tyr1472) 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 Cytometry](#)
- [Cell Culture](#)

Anti-NMDA NR2B Subunit (Tyr1472) Antibody - Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the ~180 kDa NR2B subunit of the NMDAR phosphorylated at Tyr1472 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by lysate treatment with lambda phosphatase (400 units/100uL lysate for 30 min).

Anti-NMDA NR2B Subunit (Tyr1472) Antibody - 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 Tyr-1472 on NR2B may regulate the functional expression the receptor in LTP and other forms of plasticity (Nakazawa et al., 2001; Roche et al., 2001).