

Anti-NMDA NR2B Subunit (Tyr1252) Antibody

Our Anti-NMDA NR2B Subunit (Tyr1252) rabbit polyclonal phosphospecific primary antibody from Phospho
Catalog # AN1489

Specification

Anti-NMDA NR2B Subunit (Tyr1252) Antibody - Product Information

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

Anti-NMDA NR2B Subunit (Tyr1252) 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 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 Tyr-1252 is thought to potentiate NMDA receptor-dependent influx of calcium (Takasu et al., 2002).

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 (Tyr1252) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

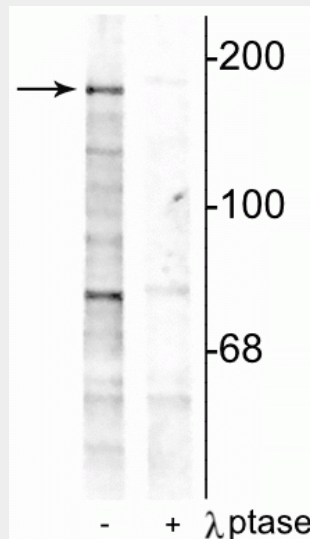
Blue Ice

Anti-NMDA NR2B Subunit (Tyr1252) Antibody - Protocols

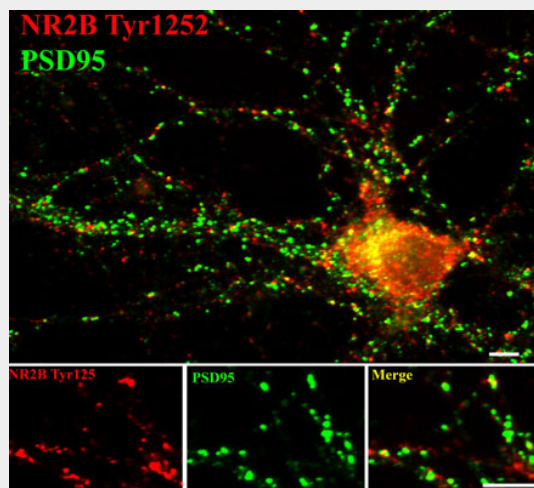
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-NMDA NR2B Subunit (Tyr1252) Antibody - Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the ~180 kDa NR2B subunit phosphorylated at Tyr1252 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase (λ -Ptase, 1200 units for 30 min).



Immunostaining of 14 DIV rat cortical neurons showing NR2B phosphorylated at Tyr1252 (red, 1:400) and PSD95 (green). Photo courtesy of Gang Liu.

Anti-NMDA NR2B Subunit (Tyr1252) 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). Phosphorylation of Tyr-1252 is thought to potentiate NMDA receptor-dependent influx of calcium (Takasu et al., 2002).