

Anti-NMDA NR2A Subunit (Tyr1325) Antibody

Our Anti-NMDA NR2A Subunit (Tyr1325) rabbit polyclonal phosphospecific primary antibody from Phospho Catalog # AN1483

Specification

Anti-NMDA NR2A Subunit (Tyr1325) Antibody - Product Information

Primary Accession
Reactivity
Bovine
Host
Clonality
Isotype

Q00959
Revine
Rabbit
Polyclonal
IgG

Calculated MW 165469

Anti-NMDA NR2A Subunit (Tyr1325) Antibody - Additional Information

Gene ID **24409**

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, NMDAR 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-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). 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). Recently, phosphorylation of Tyrosine 1325 of the NR2A subunit has been shown to be increased in human brain tissue sections from HIV-infected individuals with encephalitis (King et al., 2010). In addition, Tyr-1325 phosphorylation has been linked with depression-related behavior (Taniguchi et al., 2009).

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 NR2A Subunit (Tyr1325) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



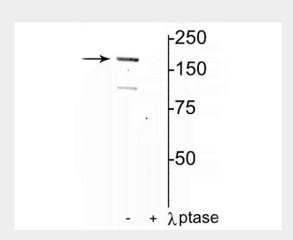
Shipping Blue Ice

Anti-NMDA NR2A Subunit (Tyr1325) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-NMDA NR2A Subunit (Tyr1325) Antibody - Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the \sim 180 kDa NR2A subunit of the NMDAR phosphorylated at Tyr1325 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 NR2A Subunit (Tyr1325) 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). 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). Recently, phosphorylation of Tyrosine 1325 of the NR2A subunit has been shown to be increased in human brain tissue sections from HIV-infected individuals with encephalitis (King et al., 2010). In addition, Tyr-1325 phosphorylation has been linked with depression-related behavior (Taniguchi et al., 2009).