

Anti-NMDA NR1 Subunit Antibody

Our Anti-NMDA NR1 Subunit primary antibody from PhosphoSolutions is mouse monoclonal. It detects hum

Catalog # AN1474

Product Information

Application	WB, IHC, ICC
Primary Accession	P35439
Host	Mouse
Clonality	Monoclonal
Isotype	IgG
Clone Names	R1JHL
Calculated MW	105509

Additional Information

Gene ID	24408
Other Names	GluN1 antibody, Glutamate [NMDA] receptor subunit zeta-1 antibody, Glutamate receptor ionotropic N methyl D aspartate 1 antibody, Glutamate receptor ionotropic N-methyl-D aspartate subunit 1 antibody, glutamate receptor ionotropic NMDA 1 antibody, Grin1 antibody, MRD8 antibody, N methyl D aspartate receptor antibody, N methyl D aspartate receptor channel subunit zeta 1 antibody, N methyl D aspartate receptor subunit NR1 antibody, N-methyl-D-aspartate receptor subunit NR1 antibody, NMD-R1 antibody, NMDA 1 antibody, NMDA R1 antibody, NMDAR1 antibody, NMDA receptor 1 antibody, NMDA1 antibody, NMDAR antibody, NMDZ1_HUMAN antibody, NR1 antibody
Target/Specificity	The ion channels activated by glutamate are typically divided into two classes. Glutamate receptors that are activated by kainate and α -amino-3-hydroxy-5-methyl-4-isoxalone propionic acid (AMPA) are known as kainate/AMPA receptors (K/AMPAR). Those that are sensitive to Nmethyl-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 (Lovering et al., 1989; Alvestad et al., 2003; Snell et al., 1996). The NMDAR is also potentiated by protein phosphorylation (Lu et al., 1999). 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.
Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A

Format	Culture supernatant
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 NR1 Subunit Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

The ion channels activated by glutamate are typically divided into two classes. Glutamate receptors that are activated by kainate and α-amino-3-hydroxy-5-methyl-4-isoxalone propionic acid (AMPA) are known as kainate/AMPA receptors (K/AMPAR). Those 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 NMDAR is also potentiated by protein phosphorylation (Lu et al., 1999). 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.