

Product Information



NMDA Receptor NR1 Subunit Monoclonal Antibody

Item No. 10607

Supplied as:	15 µg antibody vial; lyophilized from 5 mM ammonium bicarbonate. The antibody should be reconstituted in 50 µl phosphate buffered saline (PBS: 137 mM NaCl, 7.5 mM Na ₂ HPO ₄ , 2.7 mM KCl, 1.5 mM KH ₂ PO ₄ , pH 7.4) before use.
Host:	Mouse
Antigen:	Fusion protein containing amino acids 1-564 of the NR1 subunit of rat NMDA receptor
Cross Reactivity:	(+) Rat and mouse NMDA receptor
Stability:	≥1 year at -20°C
Application:	The recommended starting dilution for western blot is 1:1,000; IP is 3 µg per 200 µg lysate

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/AMPA). 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. The NMDA receptor is also one of the principal molecular targets for alcohol in the CNS. The NMDAR is also potentiated by protein phosphorylation. 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.

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10607

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MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

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