

NMDA Antibody

NMDA NR2A Subunit Pan-Specific Antibody
(CT) *NMDA NR2A Subunit Pan-Specific*

CATALOG NO.: 50-180

DESCRIPTION:

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 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.

HOST:

Rabbit

CLONALITY:

Polyclonal

IMMUNOGEN:

Fusion protein from the C-terminus region of the NR2A subunit of rat NMDA receptor.

SPECIES REACTIVITY:

H,M,R

PURIFICATION:

Serum

TESTED APPLICATION:

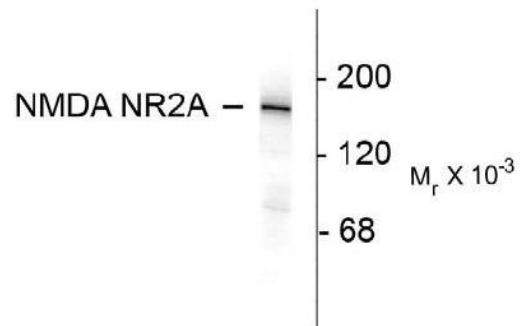
WB

APPLICATION DETAILS:

The antibody has been directly tested for reactivity in Western blots with human, mouse and rat tissue.

BUFFER:

NMDA antibody is supplied as neat serum



Western blot of 10 ug of rat hippocampal lysate showing specific immunolabeling of the ~180k NR2A subunit of the NMDA receptor.

STORAGE:

Store at -20°C, stable at -20°C for at least 1 year.

REFERENCES:

- Alvestad RM, Grosshans DR, Coultrap SJ, Nakazawa T, Yamamoto T, Browning MD (2003) Tyrosine dephosphorylation and ethanol inhibition of N-methyl-D-aspartate receptor function. *J Biol Chem* 278:11020-11025.
- Carroll RC, Zukin RS (2002) NMDA-receptor trafficking and targeting: implications for synaptic transmission and plasticity. *Trends Neurosci* 25:571-577.
- Grosshans DR, Clayton DA, Coultrap SJ, Browning MD (2002) LTP leads to rapid surface expression of NMDA but not AMPA receptors in adult rat CA1. *Nat Neurosci* 5:27-33.

USER NOTES:

Optimal dilutions/concentrations should be determined by the end user. The information provided is a guideline for product use. **This product is for research use only.**