



<b>Catalog Number:</b>	RA25063	<b>Host:</b>	Rabbit
<b>Product Type:</b>	Affinity Purified Antibody	<b>Species Reactivity:</b>	Human, Rat, Mouse
<b>Immunogen Sequence:</b>	C-terminal fusion protein representing amino acids 1253 - 1391 of rat NMDAR2B.	<b>Format:</b>	50 ul liquid containing PBS. Concentration: 0.3 mg/ml.
<b>Applications:</b>	Western Blot: 10 ug/ml Immunohistochemistry (paraffin fixed or frozen tissue)* Immunoprecipitation *		
	*Dilutions listed as a recommendation. Optimal dilution should be determined by investigator.		
<b>Storage:</b>	Store frozen. Aliquot as undiluted antisera and immediately place at -20°C. Antisera may have become trapped in top of vial during shipping. Centrifugation of vial is recommended before opening. Stable for at least 6 months at -20°C. Repeated freeze/thaw cycles compromise the integrity of the antiserum.		

### Application Notes

**Specificity:** This antibody specifically immunolabels the 2B subunit band in Western blots. This labeling is blocked by preincubation with the antigen. A band is seen at ~ 180 kDa representing the NMDAR2B.

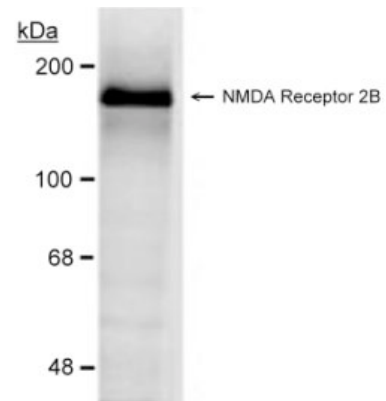
The antibody can also be used to quantitatively immunoprecipitate the NMDAR2B where 3 ul will (under appropriate conditions) quantitatively immunoprecipitate all NMDAR2B in 200 mg of rat brain.

**Localization:** Used to demonstrate that the NR2B is highly enriched in hippocampus compared to either cortex or cerebellum.

#### Description/Data:

The ion channels activated by glutamate are divided into two classes. Those that are sensitive to N-methyl-D-aspartate (NMDA) are designated NMDA receptors (NMDAR) while those activated by kainate and  $\alpha$ -amino-3-hydroxy-5-methyl-4-isoxalone propionic acid (AMPA) are known as kainate/AMPA receptors (K/AMPA). NMDA receptors are among the most studied receptors in neuroscience because they are involved in neuronal cell development and plasticity, a cellular correlate for learning. NMDA receptors are also implicated in several disorders of the central nervous system including epilepsy and ischemic neuronal cell death. NMDA receptors also appear to be a target for ethanol at physiological concentrations and therefore may play a significant role in alcoholism.

*Image: NMDA Receptor 2B Western Blot: Rat Hippocampus.*



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