

Datasheet: 6870-1109

**BATCH NUMBER 171031**

<b>Description:</b>	RABBIT ANTI RAT NMDA RECEPTOR NR2B
<b>Specificity:</b>	NMDAR NR2B
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	10 µg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen	▪			1/1000 - 1/2000
Immunoprecipitation	▪			
Western Blotting	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

### Target Species

Rat

### Species Cross Reactivity

Reacts with: Mouse, Human, Fish

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

### Product Form

Purified IgG - lyophilized

### Reconstitution

Reconstitute with 50µl of Phosphate buffered saline

### Preparation

Purified IgG prepared by affinity chromatography

### Preservative Stabilisers

None present

<b>Immunogen</b>	C-terminal fusion protein of Rat NMDAR2B (30kDa) corresponding to amino acids 984-1104.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q00960</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">24410</a> Grin2b    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_620698
<b>Specificity</b>	<p><b>Rabbit anti Rat NMDA Receptor NR2B antibody</b> recognizes the ~180 kDa NMDA (N-methyl-D-aspartate) receptor NMDAR2B subunit.</p> <p>NMDA receptors are a class of ionotropic glutamate receptors. NMDA channels have been shown to be involved in long term potentiation, an activity dependent increase in the efficiency of synaptic transmission thought to underlie certain kinds of memory and learning. NMDA receptor channels are heteromers composed of the key receptor subunit NMDAR1 (GRIN1) and 1 or more of the 4 NMDAR2 subunits: NMDAR2A (GRIN2A), NMDAR2B (GRIN2B), NMDAR2C (GRIN2C), or NMDAR2D (GRIN2D).</p>
<b>Histology Positive Control Tissue</b>	Hippocampus.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Grosshans, D.R. and Browning, M.D. (2001) Protein kinase C activation induces tyrosine phosphorylation of the NR2A and NR2B subunits of the NMDA receptor. <a href="#">J Neurochem. 76: 737-44.</a></li> <li>2. Asaka, Y. <i>et al.</i> (2006) Hippocampal synaptic plasticity is impaired in the Mecp2-null mouse model of Rett syndrome. <a href="#">Neurobiol Dis. 21: 217-27.</a></li> <li>3. Maliszewska-Cyna, E. <i>et al.</i> (2010) Diminished prevalence but preserved synaptic distribution of N-methyl-D-aspartate receptor subunits in the methyl CpG binding protein 2(MeCP2)-null mouse brain. <a href="#">Neuroscience. 168: 624-32</a></li> </ol>
<b>Storage</b>	<p>Prior to reconstitution store at +4°C.  After reconstitution store at -20°C.  Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10305 available at:  <a href="https://www.bio-rad-antibodies.com/SDS/6870-1109">https://www.bio-rad-antibodies.com/SDS/6870-1109</a>  10305</p>
<b>Regulatory</b>	For research purposes only
<b>Technical Advice</b>	3 µl of antibody will quantitatively immunoprecipitate all NMDAR2B in 200 µg of rat brain.

Optimal working dilutions must be determined by the end user.

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## Related Products

### Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

### Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

**North & South** Tel: +1 800 265 7376

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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