

Datasheet: AHP1235

Description:	RABBIT ANTI NMDA RECEPTOR NR2B (pTyr1252)
Specificity:	NMDAR NR2B (pTyr1252)
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 ml

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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			1/1000

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	Based on sequence similarity, is expected to react with: Human, Mouse, Dog, Bovine, Chicken, Zebrafish 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 - liquid
Antiserum Preparation	Antisera to rat NMDAR NR2B subunit pTyr1252 were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG prepared by affinity chromatography.
Buffer Solution	10 mM Hepes pH7.5

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 50% Glycerol 0.01% Bovine Serum Albumin
Immunogen	Phosphopeptide corresponding to amino acid residues surrounding the phosphorylated tyrosine 1252 of the NR2B subunit of rat NMDA receptor.
External Database Links	<p>UniProt: Q00960 Related reagents</p> <p>Entrez Gene: 24410 Grin2b Related reagents</p>
RRID	AB_877491
Specificity	<p>Rabbit anti Rat NMDA receptor NR2B (pTyr1252) antibody recognizes NMDA receptor NR2B, also known as glutamate receptor ionotropic, NMDA 2B (GluN2B), glutamate [NMDA] receptor subunit epsilon-2 and N-methyl D-aspartate receptor subtype 2B (NMDAR2B), when phosphorylated at tyrosine 1252.</p> <p>Receptors for NMDA belong to a group of ionotropic glutamate receptors which play a key role in the mediation of glutamate neurotransmission within the mammalian central nervous system (CNS), including involvement in memory and learning processes. Several antagonists and agonists of NMDA receptors (NMDAR) have been identified, including the glutamate analogue Homoquinolinic acid, which displays a higher affinity for NR2B-containing NMDAR. Properties of NMDAR include modulation by glycine, inhibition by Zn²⁺, voltage-dependent Mg²⁺ blockade and high Ca²⁺ permeability.</p> <p>The involvement of NMDAR in the CNS implicated in neurodegenerative diseases such as Alzheimer's (Popke 2003) and also epilepsy and ischemic neuronal cell death.</p>
Western Blotting	AHP1235 detects a band/s of approximately 180kDa in rat hippocampal cell lysates.
References	1. Takasu, M.A. <i>et al.</i> (2002) Modulation of NMDA receptor-dependent calcium influx and gene expression through EphB receptors. Science. 295 (5554): 491-5.
Further Reading	<p>1. Ishii, T. <i>et al.</i> (1993) Molecular characterization of the family of the N-methyl-D-aspartate receptor subunits. J Biol Chem. 268 (4): 2836-43.</p> <p>2. Rosenblum, K. <i>et al.</i> (1996) Long-term potentiation increases tyrosine phosphorylation of the N-methyl-D-aspartate receptor subunit 2B in rat dentate gyrus in vivo. Proc Natl Acad Sci U S A. 93 (19): 10457-60.</p> <p>3. Popke, E.J. (2003) From anticholinesterase toxicity to Alzheimer's disease: important interactions of cholinergic and NMDA receptor systems. Toxicol Sci. 72 (2): 185-7.</p>
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10088 available at: https://www.bio-rad-antibodies.com/SDS/AHP1235 10088
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

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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://www.bio-rad-antibodies.com/datasheets)
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