

Datasheet: AHP991

Description:	RABBIT ANTI NMDA RECEPTOR/NR1 SUBUNIT/SPLICE VARIANT N1
Specificity:	NMDAR/NR1/N1
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	25 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen	■			1/1000 - 1/2000
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting	■			1/1000

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Rat
Species Cross Reactivity	<p>Reacts with: Mouse</p> <p>Based on sequence similarity, is expected to react with: Human, Chicken, Monkey, Dog, Xenopus</p> <p>N.B. Antibody reactivity and working conditions may vary between species.</p>
Product Form	Purified IgG - lyophilised
Reconstitution	<p>Reconstitute with 50ul phosphate buffered saline (PBS).</p> <p>Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.</p>
Antiserum Preparation	Antisera to rat NMDA receptor, NR1 subunit, splice variant N1 were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography.
Preservative Stabilisers	None present
Immunogen	Synthetic peptide from rat NMDA receptor NR1 subunit, containing the N1 splice variant insert.

**External Database
Links**

UniProt:

[P35439](#) [Related reagents](#)
[P35438](#) [Related reagents](#)

Entrez Gene:

[24408](#) Grin1 [Related reagents](#)
[14810](#) Grin1 [Related reagents](#)

Synonyms

Glurz1, Nmdar1

Specificity

Rabbit anti Rat NMDA Receptor/NR1 Subunit/Splice Variant N1 antibody recognizes the 120 kDa NR1 subunit of the NMDA (N-methyl-D-aspartate) receptor, containing the N1 splice variant insert. Rabbit anti Rat NMDA Receptor/NR1 Subunit/Splice Variant N1 antibody does not recognize the NR1 subunit, where the N1 splice variant insert is absent.

Receptors for NMDA (NMDAR) 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. Properties of NMDAR include modulation by glycine, inhibition by Zn²⁺, voltage-dependent Mg²⁺ blockade and high Ca²⁺ permeability.

The NR1 subunit has eight splice variants, arising from either the deletion or insertion of three exon cassettes within the C-terminal (C1, C2) and N-terminal (N1) NR1 domains. These splice variants differ in both their expression and pharmacological properties.

Further Reading

1. Ishii, T. *et al.* (1993) Molecular characterization of the family of the N-methyl-D-aspartate receptor subunits. [J Biol Chem. 268 \(4\): 2836-43.](#)
2. Ehlers, M.D. *et al.* (1998) Splice variant-specific interaction of the NMDA receptor subunit NR1 with neuronal intermediate filaments. [J Neurosci. 18 \(2\): 720-30.](#)

Storage

Prior to reconstitution store at +4°C.
After reconstitution store at -20°C.
Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

12 months from date of reconstitution.

**Health And Safety
Information**

Material Safety Datasheet documentation #10043 available at:
10043: <https://www.bio-rad-antibodies.com/uploads/MSDS/10043.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

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

Sheep Anti Rabbit IgG (2AB02...)

[Biotin](#)

Sheep Anti Rabbit IgG (STAR36...)

[DyLight®488](#), [DyLight®549](#), [DyLight®649](#),
[DyLight®680](#), [DyLight®800](#)

Recommended Useful Reagents

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

North & South

Tel: +1 800 265 7376

America

Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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