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Datasheet for 600-401-D94

NMDA R2C Antibody

Overview

Description:	Anti-NMDA R2C (RABBIT) Antibody - 600-401-D94
Item No.:	600-401-D94
Size:	10 µg
Applications:	IP, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	NMDA R2C Antibody detects NMDA R2C protein. The ion channels activated by glutamate that are sensitive to N-methyl-D-aspartate (NMDA) are designated NMDA receptors (NMDAR). The 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. The NMDA receptor is also one of the principal molecular targets for alcohol in the CNS. The NMDAR is also potentiated by protein phosphorylation. 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. The NR2C subunit of the receptor is thought to influence the NMDAR conductance level. Anti-NMDA R2C Antibody is ideal for investigators involved in Neuroscience, Signal Transduction, and Cell Signaling Research.
Synonyms:	Glutamate [NMDA] receptor subunit epsilon-3, N-methyl D-aspartate receptor subtype 2C, NMDAR2C, NR2C
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Grin2c

Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-NMDA R2C Antibody was produced by repeated immunizations with a fusion proteins from the N-terminal region of the NR2C subunit.
Purity/Specificity:	Anti-NMDA R2C antibody is directed against NMDA R2C protein. The antibody was affinity purified from monospecific antiserum by immunoaffinity purification. Immunolabeling is blocked by preadsorption of antibody with the immunogen that was used to generate the antibody. Reactivity is expected from human and mouse. Cross reactivity from other species has not been determined.
Relevant Links:	• UniProtKB - Q00961 • GeneID - 24411 • UniProtKB - Q00961.1

Application Details

Tested Applications:	IP, WB
Application Note:	Anti-NMDA R2C Antibody is tested for use in Western Blotting and Immunoprecipitation and suitable for IHC and IF. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 140 kDa in size corresponding to the NR2C subunit of the NMDA receptor. This antibody also labels the approximately 180 kDa NR2A and NR2B subunits of the NMDA receptor.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	1:1000-2000
IHC:	1:1000-2000
IP:	3µl per 200µg lysate
WB:	1:1000

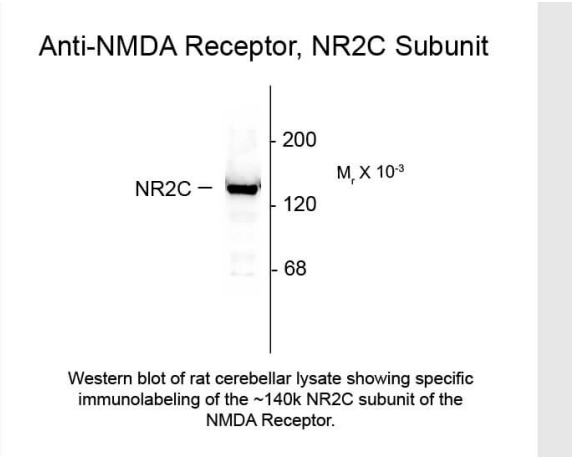
Formulation

Physical State:	Lyophilized
Reconstitution Volume:	50µL
Reconstitution Buffer:	Neutral PBS

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western blot of rat cerebellar lysate showing specific immunolabeling of the ~140k NR2C subunit of the NMDA Receptor.

Western Blot
Western Blot of Rabbit anti-NMDA R2C antibody. Lane 1: rat cerebellar lysate. Lane 2: none. Load: 10 µg per lane. Primary antibody: NMDA R2C antibody at 1:1,000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 140 kDa for NMDA R2C. Other band(s): none.

References

- Yoshikawa M et al. Free d-Amino Acids in Salivary Gland in Rat. *Biology.* (2022)

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