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Datasheet for 612-401-C88

NMDA NR2B Subunit phospho Y1336 Antibody

Overview

Description:	Anti-NMDA NR2B Subunit pY1336 (RABBIT) Antibody - 612-401-C88
Item No.:	612-401-C88
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	NMDA 2B pY1336 antibody detects NMDA 2B receptor protein. 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 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. Phosphorylation of Tyr1336 is thought to potentiate NMDA receptor-dependent influx of calcium and ischemia may also increase the phosphorylation of this site. NMDA NR2B Subunit pY1336 antibody is ideal for investigators involved in Cell Signaling, Neuroscience, and Signal Transduction research.
Synonyms:	Glutamate [NMDA] receptor subunit epsilon-2, N-methyl D-aspartate receptor subtype 2B, NMDAR2B, NR2B, Grin2b
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Grin2b
Reactivity:	Mouse, Rat

PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-NMDA NR2B Subunit pY1336 Antibody was produced by repeated immunizations with a synthetic phospho-peptide corresponding to amino acid residues surrounding Tyr1336.
Purity/Specificity:	Anti-NMDA NR2B Subunit pY1336 antibody is directed against rat NMDA 2B receptor protein. The antibody was affinity purified from monospecific antiserum by immunoaffinity purification. Anti-NMDA NR2B Subunit pY1336 antibody is specific for the phosphorylated protein. Immunolabeling of the NMDAR NR2B subunit band is blocked by lambda-phosphatase treatment. The antibody has been directly tested for reactivity in Western blots rat tissue. Reactivity is expected from the following species based on 100% sequence homology: human, mouse and non-human primates.
Relevant Links:	• NCBI - NP_036706.1 • UniProtKB - Q00960 • GeneID - 24410

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-NMDA NR2B Subunit pY1336 (Rabbit) antibody is tested for use in Western Blotting and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 180 kDa in size corresponding to NMDAR NR2B subunit protein phosphorylated at Tyr1336 in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:400
WB:	1:1000

Formulation

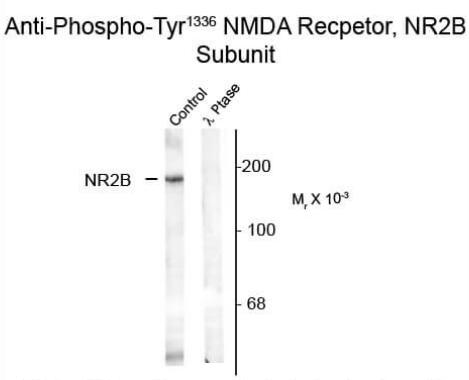
Physical State:	Liquid
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western blot of rat hippocampal lysate showing phosphospecific immunolabeling of the ~180k NR2B subunit of the NMDAR phosphorylated at Tyr1336.

Western Blot

Western Blot of Rabbit anti-NMDA NR2B Subunit Tyr1336 antibody. Lane 1: rat hippocampal lysate (control). Lane 2: λ-Ptase. Load: 10 µg per lane. Primary antibody: NMDA NR2B Subunit Tyr1336 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: 180 kDa for NMDA NR2B Subunit Tyr1336. Other band(s): none.

Disclaimer

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