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Datasheet for 600-401-D90

NMDA R2A phospho Y1325 Antibody

Overview

Description:	Anti-NMDA R2A pY1325 (RABBIT) Antibody - 600-401-D90
Item No.:	600-401-D90
Size:	100 µL
Applications:	WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	NMDA R2A pY1325 Antibody detects NMDA R2A 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. Channels with physiological characteristics are produced when the NR1 subunit is combined with one or more of the NMDAR2 (NR2 A-D) subunits. Recently, phosphorylation of Tyrosine 1325 of the NR2A subunit has been shown to be increased in human brain tissue sections from HIV-infected individuals with encephalitis. In addition, Tyr1325 phosphorylation has been linked with depression-related behavior. Anti-NMDA R2A pY1325 Antibody is ideal for investigators involved in Neuroscience, Signal Transduction, and Cell Signaling Research.
Synonyms:	Glutamate [NMDA] receptor subunit epsilon-1, N-methyl D-aspartate receptor subtype 2A, NMDAR2A, NR2A, Grin2a
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Grin2a
Reactivity:	Mouse, Rat

PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-NMDA R2A pY1325 Antibody was produced by repeated immunizations with a synthetic phospho-peptide corresponding to amino acid residues surrounding Tyr1325.
Purity/Specificity:	Anti NMDA R2A pY1325 antibody is directed against NMDA R2A protein. The antibody was affinity purified from monospecific antiserum by immunoaffinity purification. The antibody is specific for the protein phosphorylated at Y1325. Immunolabeling is completely blocked by the phosphopeptide used as the antigen but not by the corresponding dephosphopeptide. Reactivity is expected from mouse. Cross reactivity with NMDA R2A from other species has not been determined.
Relevant Links:	• UniProtKB - Q00959 • GeneID - 24409 • UniProtKB - Q00959.2

Application Details

Tested Applications:	WB
Application Note:	Anti-NMDA R2A pY1325 Antibody is tested for use in Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 180 kDa in size corresponding to NMDAR NR2A subunit protein phosphorylated at Tyr 1325 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.
WB:	1:1000

Formulation

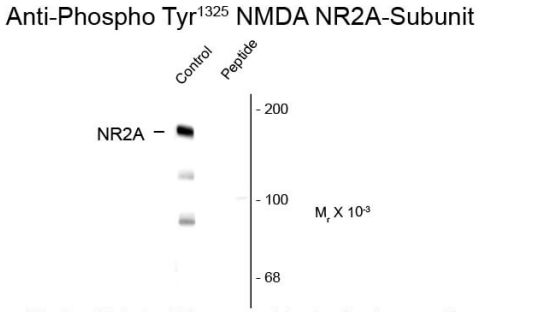
Physical State:	Liquid
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

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 specific immunolabeling of the ~180k NR2A subunit of the NMDAR phosphorylated at Tyr1325 (Control). In the second lane, immunoreactivity is blocked by preadsorption with the phospho-peptide (Peptide) used as antigen.

Western Blot
Western Blot of Rabbit anti-NMDA R2A pT1325 antibody. Lane 1: rat hippocampal lysate (control). Lane 2: Peptide. Load: 10 µg per lane. Primary antibody: NMDA R2A pT1325 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 R2A pT1325. Other band(s): NMDA R2A pT1325 splice variants and isoforms.

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