

Anti-Phospho-GRIN2B-(Y1474) Antibody



Description N-methyl-D-aspartate (NMDA) receptors are a class of ionotropic

glutamate receptors. NMDA receptor channel has been shown to be involved in long-term potentiation, an activity-dependent increase in the efficiency of synaptic transmission thought to underlie certain kinds of memory and learning. NMDA receptor channels are heteromers composed of three different subunits: NR1 (GRIN1), NR2 (GRIN2A, GRIN2B, GRIN2C, or GRIN2D) and NR3 (GRIN3A or GRIN3B). The NR2 subunit

acts as the agonist binding site for glutamate. This receptor is the

predominant excitatory neurotransmitter receptor in the mammalian brain.

Model STJ116391

Host Rabbit

Reactivity Human

Applications WB

Immunogen A synthetic phosphorylated peptide around Y1474 of human GRIN2B

(NP_000825.2).

Gene ID 2904

Gene Symbol GRIN2B

Dilution range WB 1:500 - 1:2000

Tissue Specificity Primarily found in the fronto-parieto-temporal cortex and hippocampus

pyramidal cells, lower expression in the basal ganglia

Purification Affinity purification

Note For Research Use Only (RUO).

Protein Name Glutamate receptor ionotropic NMDA 2B GluN2B Glutamate receptor

subunit epsilon-2 N-methyl D-aspartate receptor subtype 2B NMDAR2B

NR2B N-methyl-D-aspartate receptor subunit 3 NR3 hNR3

Molecular Weight 166.367 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:4586OMIM:138252Reactome:R-HSA-3928662

Alternative Names Glutamate receptor ionotropic NMDA 2B GluN2B Glutamate receptor

subunit epsilon-2 N-methyl D-aspartate receptor subtype 2B NMDAR2B

NR2B N-methyl-D-aspartate receptor subunit 3 NR3 hNR3

Function Component of NMDA receptor complexes that function as heterotetrameric,

ligand-gated ion channels with high calcium permeability and voltagedependent sensitivity to magnesium, Channel activation requires binding of the neurotransmitter glutamate to the epsilon subunit, glycine binding to the zeta subunit, plus membrane depolarization to eliminate channel inhibition by

Mg(2+),

Cellular Localization Cell membrane

Post-translational Phosphorylated on tyrosine residues, Phosphorylation at Ser-1303 by DAPK1

Modifications enhances synaptic NMDA receptor channel activity,

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