

NMDAR2B polyclonal antibody

Catalog: BS67360

Host: Rabbit

Reactivity: Human, Mouse, Rat

BackGround:

N-methyl-D-aspartate receptor (NMDAR) forms a heterodimer of at least one NR1 and one NR2A-D subunit. Multiple receptor isoforms with distinct brain distributions and functional properties arise by selective splicing of the NR1 transcripts and differential expression of the NR2 subunits. NR1 subunits bind the co-agonist glycine and NR2 subunits bind the neurotransmitter glutamate. Activation of the NMDA receptor or opening of the ion channel allows flow of Na⁺ and Ca²⁺ ions into the cell, and K⁺ out of the cell. Each subunit has a cytoplasmic domain that can be directly modified by the protein kinase/phosphatase. PKC can phosphorylate the NR1 subunit (NMDAR1) of the receptor at Ser890/Ser896, and PKA can phosphorylate NR1 at Ser897. The phosphorylation of NR1 by PKC decreases its affinity for calmodulin, thus preventing the inhibitory effect of calmodulin on NMDAR. The phosphorylation of NR1 by PKA probably counteracts the inhibitory effect of calcineurin on the receptor. NMDAR mediates long-term potentiation and slow postsynaptic excitation, which play central roles in learning, neurodevelopment, and ty .EphrinB2 binding to the receptor EphB leads to the activation of Src family tyrosine kinases, which phosphorylate NMDAR2B at Tyr1252, Tyr1336 and Tyr1472. In turn, phosphorylated NMDAR2B enhances the ability of the functional NMDA receptor to regulate Ca²⁺ influx in response to glutamate.

Product:

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

Molecular Weight:

~ 190 kDa

Swiss-Prot:

Q13224

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000)

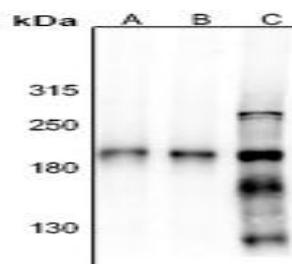
Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

Specificity:

Recognizes endogenous levels of NMDAR2B protein.

DATA:



Western blot analysis of NMDAR2B expression in rat brain (A), mouse brain (B), U87MG (C) whole cell lysates.

Note:

For research use only, not for use in diagnostic procedure.

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