

Anti-Phospho-NMDA Receptor NR2B Subunit (Tyr1336) Grin2b Antibody

Catalog Number: P01883-2

About GRIN2B

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 (Grosshans et al., 2002; Wenthold et al., 2003; Carroll and Zukin, 2002). 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 (Ishii et al., 1993). Phosphorylation of Tyr-1336 is thought to potentiate NMDA receptor-dependent influx of calcium (Takasu et al., 2002) and ischemia may also increase the phosphorylation of this site (Takagi et al., 2003).

Overview

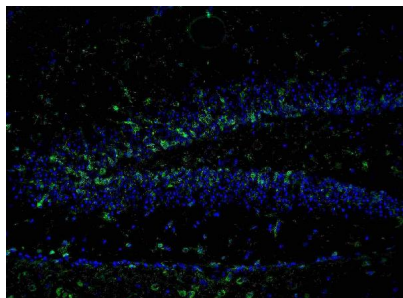
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|----------------------|--|
| Product Name | Anti-Phospho-NMDA Receptor NR2B Subunit (Tyr1336) Grin2b Antibody |
| Reactive Species | Mouse, Rat |
| Description | Boster Bio Anti-Phospho-NMDA Receptor NR2B Subunit (Tyr1336) Grin2b Antibody (Catalog # P01883-2). Tested in WB, IHC applications. This antibody reacts with Mouse, Rat. |
| Application | IHC, WB |
| Clonality | Polyclonal 608 |
| Formulation | 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol. |
| Storage Instructions | Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C. After date of receipt, stable for at least 1 year at -20°C. |
| Host | Rabbit |
| Uniprot ID | Q00960 |

Technical Details

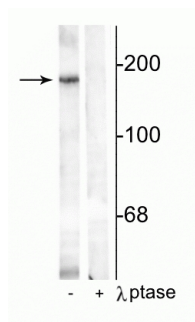
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|----------------------------|---|
| Immunogen | Synthetic phospho-peptide corresponding to amino acid residues surrounding Tyr1336 of the NR2B subunit of the rat NMDA receptor, conjugated to keyhole limpet hemocyanin (KLH). Immunogen species is Rat. |
| Predicted Reactive Species | Human, Primate |
| Cross Reactivity | No cross reactivity with other proteins. |
| Isotype | IgG |
| Form | Liquid |

| | |
|---------------------|---|
| Concentration | 0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure. |
| Purification | Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns. |
| Suggested Dilutions | <p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>WB: 1:1000 IHC: 1:400 ICC: 1:100</p> |

Anti-Phospho-NMDA Receptor NR2B Subunit (Tyr1336) Grin2b Antibody (P01883-2) Images



Immunostaining of mouse dentate gyrus 48 hour post TMT treatment showing NR2B when phosphorylated at Tyr¹³³⁶ in green and nuclei in blue.



Western blot of rat hippocampal lysate showing specific immunolabeling of the ~180 kDa NR2B subunit phosphorylated at Tyr¹³³⁶ in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase (gamma-Ptase, 1200 units for 30 min).

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