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PRODUCT DATASHEET

Anti-NMDA NR2B Subunit (Tyr1252) Antibody

phosphosolutions ANTIBODIES THAT WORK Pooled Serum

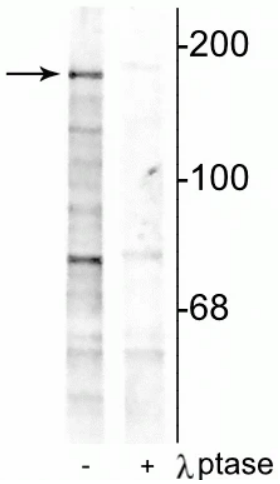
Product Details

Available Variants	100 µL (SKU:p1516-1252) 25 µL (SKU:p1516-1252t)
Conjugate	Unconjugated
Isotype	IgG
Gene Name	GRIN2B
Host Species	Rabbit
Format	Antigen Affinity Purified from Pooled Serum
Physical State	Liquid
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Production Notes	Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.
Applications	ELISA, IHC, WB
Dilution Ranges	WB: 1:1000 WB Brain: 1:1000 ICC: 1:100-1:400
Species Reactivity	Mouse, Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Tyr1252 of the NR2B subunit of the rat NMDA receptor, conjugated to keyhole limpet hemocyanin (KLH).
Specificity	Specific for endogenous levels of the ~180 kDa NMDAR NR2B-subunit protein phosphorylated at Tyr1252 . Immunolabeling is completely eliminated by treatment with λ-phosphatase. May also show slight reactivity with Tyr1246 of NR2A.
Molecular Weight	180 kDa

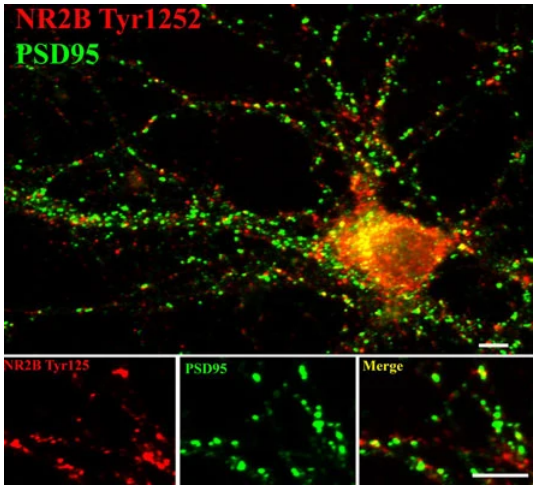
Quality Control	Western blots performed on each lot.
Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Antibody Registry ID	AB_2492180
UniProt ID	Q00960 UniProt Summary: Component of N-methyl-D-aspartate (NMDA) receptors (NMDARs) that function as heterotetrameric, ligand-gated cation channels with high calcium permeability and voltage-dependent block by Mg(2+) (PubMed:24272827, PubMed:24863970, PubMed:26875626, PubMed:26919761, PubMed:27839871, PubMed:28095420, PubMed:28126851, PubMed:38538865, PubMed:8768735). Participates in synaptic plasticity for learning and memory formation by contributing to the long-term depression (LTD) of hippocampus membrane currents (By similarity). Channel activation requires binding of the neurotransmitter L-glutamate to the GluN2 subunit, glycine or D-serine binding to the GluN1 subunit, plus membrane depolarization to eliminate channel inhibition by Mg(2+) (PubMed:24272827, PubMed:24863970, PubMed:26875626, PubMed:26919761, PubMed:27839871, PubMed:28095420, PubMed:28126851, PubMed:38538865, PubMed:8768735). NMDARs mediate simultaneously the potassium efflux and the influx of calcium and sodium (By similarity). Each GluN2 subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, Ca2(+) permeability, and binding to allosteric modulators (PubMed:26875626, PubMed:28095420, PubMed:28126851, PubMed:38538865, PubMed:8768735). In concert with DAPK1 at extrasynaptic sites, acts as a central mediator for stroke damage. Its phosphorylation at Ser-1303 by DAPK1 enhances synaptic NMDA receptor channel activity inducing injurious Ca2+ influx through them, resulting in an irreversible neuronal death (By similarity). {ECO:0000250|UniProtKB:P35438, ECO:0000250|UniProtKB:Q01097, ECO:0000269|PubMed:24272827, ECO:0000269|PubMed:24863970, ECO:0000269|PubMed:26875626, ECO:0000269|PubMed:26919761, ECO:0000269|PubMed:27839871, ECO:0000269|PubMed:28095420, ECO:0000269|PubMed:28126851, ECO:0000269|PubMed:38538865, ECO:0000269|PubMed:8768735}.
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
Expected Reactivity	Bovine, Canine, Chicken, Human, Non-Human Primate, Zebrafish

Post Translational Modification Type	Phosphorylated
Post Translational Modification Residue	Tyr1252
NCBI Gene ID	24410

Product Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the ~180 kDa NR2B subunit phosphorylated at Tyr1252 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase (λ-Ptase, 1200 units for 30 min).



Immunostaining of 14 DIV rat cortical neurons showing NR2B phosphorylated at Tyr1252 (red, 1:400) and PSD95 (green). Photo courtesy of Gang Liu.

Created on 30. October 2026 | All information without guarantee