

NMDAε1/2 (phospho Tyr1246/1252) Polyclonal Antibody

Catalog No: YP1147

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: NMDAε1/2

Fields: >>Ras signaling pathway;>>Rap1 signaling pathway;>>Calcium signaling

pathway;>>cAMP signaling pathway;>>Neuroactive ligand-receptor

interaction;>>Circadian entrainment;>>Long-term potentiation;>>Glutamatergic synapse;>>Dopaminergic synapse;>>Alzheimer disease;>>Amyotrophic lateral

sclerosis;>>Spinocerebellar ataxia;>>Prion disease;>>Pathways of

neurodegeneration - multiple diseases;>>Cocaine addiction;>>Amphetamine addiction;>>Nicotine addiction;>>Alcoholism;>>Systemic lupus erythematosus

Gene Name: GRIN2A/GRIN2B

Protein Name: Glutamate [NMDA] receptor subunit epsilon-1/2

Q12879/Q13224

Human Gene Id: 2903/2904

Human Swiss Prot

No:

Mouse Gene ld: 14811/14812

Rat Gene Id: 24409/24410

Rat Swiss Prot No: Q00959/Q00960

Immunogen: The antiserum was produced against synthesized peptide derived from human

NMDAR2A/B around the phosphorylation site of Tyr1246/1252. AA

range:1216-1265

Specificity: Phospho-NMDAε1/2 (Y1246/1252) Polyclonal Antibody detects endogenous

levels of NMDAs1/2 protein only when phosphorylated at Y1246/1252.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.



Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500-2000 IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet

tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 170kD

Cell Pathway: Calcium; Neuroactive ligand-receptor interaction; Long-term

potentiation; Alzheimer's disease; Amyotrophic lateral sclerosis (ALS); Systemic

lupus erythematosus;

Background: This gene encodes a member of the glutamate-gated ion channel protein family.

The encoded protein is an N-methyl-D-aspartate (NMDA) receptor subunit. NMDA receptors are both ligand-gated and voltage-dependent, and are involved in long-term potentiation, an activity-dependent increase in the efficiency of synaptic transmission thought to underlie certain kinds of memory and learning. These receptors are permeable to calcium ions, and activation results in a calcium influx into post-synaptic cells, which results in the activation of several signaling cascades. Disruption of this gene is associated with focal epilepsy and speech disorder with or without mental retardation. Alternative splicing results in

multiple transcript variants. [provided by RefSeq, May 2014],

Function: function:NMDA receptor subtype of glutamate-gated ion channels possesses

high calcium permeability and voltage-dependent sensitivity to magnesium. Activation requires binding of agonist to both types of subunits.,similarity:Belongs to the glutamate-gated ion channel (TC 1.A.10) family.,subunit:Forms heteromeric

channel of a zeta subunit (GRIN1), a epsilon subunit (GRIN2A, GRIN2B, GRIN2C or GRIN2D) and a third subunit (GRIN3A or GRIN3B). Found in a complex with GRIN1 and GRIN3B. Found in a complex with GRIN1, GRIN3A and PPP2CB. Interacts with PDZ domains of AIP1, INADL and DLG4. Interacts with

HIP1.,

Subcellular Location:

Cell projection, dendritic spine. Cell membrane; Multi-pass membrane protein. Cell junction, synapse. Cell junction, synapse, postsynaptic cell membrane; Multi-

pass membrane protein. Cytoplasmic vesicle membrane. Expression at the dendrite cell membrane and at synapses is regulated by SORCS2 and the

retromer complex. .

Expression: Brain, Cerebellum, Epithelium, Hippocampus,

2/4

Tag: hot

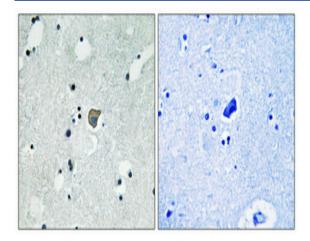
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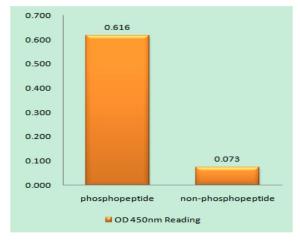
Host: Rabbit

Modifications: Phospho

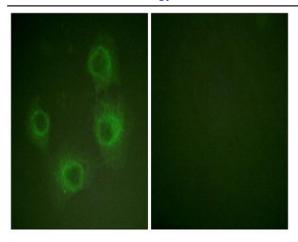
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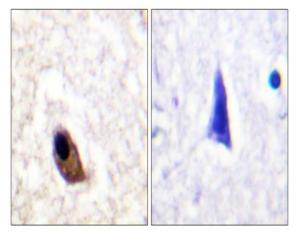
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using NMDAR2A/B (Phospho-Tyr1246/1252) Antibody



Immunofluorescence analysis of HUVEC cells, using NMDAR2A/B (Phospho-Tyr1246/1252) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using NMDAR2A/B (Phospho-Tyr1246/1252) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of NMDAR2A/B (Phospho-Tyr1246/1252) Antibody. The lane on the right is blocked with the NMDAR2A/B (Phospho-Tyr1246/1252) peptide.