

NMDAζ1 (phospho Ser890) Polyclonal Antibody

Catalog No: YP1135

Reactivity: Human; Mouse; Rat

Applications: IHC;IF;ELISA

Target: NMDAR1

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

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

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

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

neurodegeneration - multiple diseases;>>Cocaine addiction;>>Amphetamine

addiction;>>Nicotine addiction;>>Alcoholism

Gene Name: GRIN1

Protein Name: Glutamate [NMDA] receptor subunit zeta-1

Human Gene Id: 2902

Human Swiss Prot

Prot Q05586

No:

Mouse Gene Id: 14810

Mouse Swiss Prot

P35438

No:

Rat Gene ld: 24408

Rat Swiss Prot No: P35439

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

NMDAR1 around the phosphorylation site of Ser890. AA range:856-905

Specificity: Phospho-NMDAζ1 (S890) Polyclonal Antibody detects endogenous levels of

NMDA71 protein only when phosphorylated at S890.

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



Sormedation : Polyclonal, Rabbit, IgG

Dilution: IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. 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: 105kD

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

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

disease;

Background: The protein encoded by this gene is a critical subunit of N-methyl-D-aspartate

receptors, members of the glutamate receptor channel superfamily which are heteromeric protein complexes with multiple subunits arranged to form a ligand-gated ion channel. These subunits play a key role in the plasticity of synapses, which is believed to underlie memory and learning. Cell-specific factors are thought to control expression of different isoforms, possibly contributing to the functional diversity of the subunits. Alternatively spliced transcript variants have

been described. [provided by RefSeq, Jul 2008],

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

calcium permeability and voltage-dependent sensitivity to magnesium. Mediated by glycine. This protein plays a key role in synaptic plasticity, synaptogenesis, excitotoxicity, memory acquisition and learning. It mediates neuronal functions in glutamate neurotransmission. Is involved in the cell surface targeting of NMDA receptors.,online information:NMDA receptor entry,PTM:NMDA is probably

regulated by C-terminal phosphorylation of an isoform of NR1 by PKC.

Dephosphorylated on Ser-897 probably by protein phosphatase 2A (PPP2CB). Its phosphorylated state is influenced by the formation of the NMDAR-PPP2CB complex and the NMDAR channel activity.,similarity:Belongs to the glutamategated ion channel (TC 1.A.10) family.,subcellular location:Enriched in post-

synaptic plasma membrane and post-synaptic densities., subunit: Fo

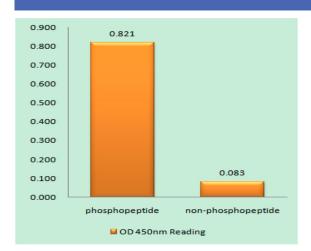
Subcellular
Location:

Cell membrane ; Multi-pass membrane protein . Cell junction, synapse, postsynaptic cell membrane . Cell junction, synapse, postsynaptic density .

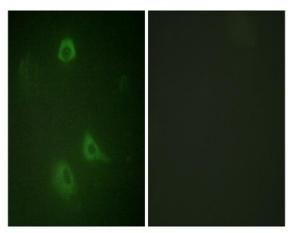
Enriched in postsynaptic plasma membrane and postsynaptic densities. .

Expression : Brain, Cerebellum, Hippocampus,

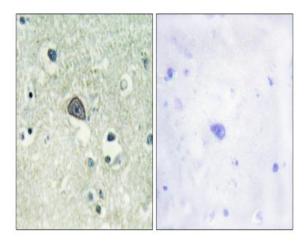
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using NMDAR1 (Phospho-Ser890) Antibody



Immunofluorescence analysis of A549 cells, using NMDAR1 (Phospho-Ser890) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using NMDAR1 (Phospho-Ser890) Antibody. The picture on the right is blocked with the phospho peptide.