

## NMDAζ1 (phospho Ser890) Polyclonal Antibody

YP1135 Catalog No:

Reactivity: Human; Mouse; Rat

IHC;IF;ELISA **Applications:** 

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

P35438

**Human Gene Id:** 2902

**Human Swiss Prot** 

Q05586

No:

Mouse Gene Id: 14810

**Mouse Swiss Prot** 

No:

Rat Gene Id: 24408

Rat Swiss Prot No: P35439

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

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.



Soumdation: 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

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

105kD **Molecularweight:** 

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

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

disease;

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

receptors, members of the glutamate receptor channel superfamily which are heteromeric protein complexes with multiple subunits arranged to form a ligandgated 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 RefSeg, 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. .

Brain, Cerebellum, Hippocampus, **Expression:** 



**Sort**: 10901

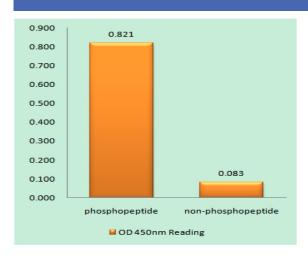
No2: 3381S

**No4:** 1

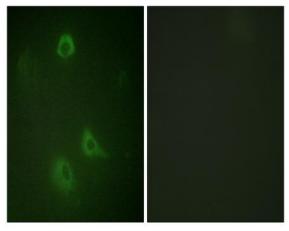
Host: Rabbit

Modifications: Phospho

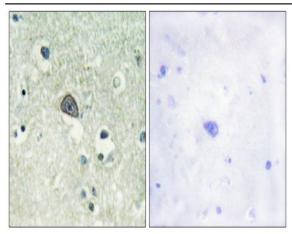
## **Products Images**



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.