



NMDA ζ 1 (phospho Ser890) Polyclonal Antibody

Catalog No	YP-Ab-16358
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF;ELISA
Gene Name	GRIN1
Protein Name	Glutamate [NMDA] receptor subunit zeta-1
Immunogen	The antiserum was produced against synthesized peptide derived from human NMDAR1 around the phosphorylation site of Ser890. AA range:856-905
Specificity	Phospho-NMDA ζ 1 (S890) Polyclonal Antibody detects endogenous levels of NMDA ζ 1 protein only when phosphorylated at S890.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	GRIN1; NMDAR1; Glutamate [NMDA] receptor subunit zeta-1; N-methyl-D-aspartate receptor subunit NR1; NMD-R1
Observed Band	
Cell Pathway	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. .
Tissue Specificity	Brain,Cerebellum,Hippocampus,
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 glutamate-gated ion channel (TC 1.A.10) family.,subcellular location:Enriched in post-synaptic plasma membrane and post-synaptic densities.,subunit:Fo



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],

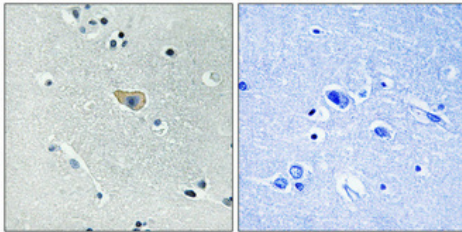
matters needing attention

Avoid repeated freezing and thawing!

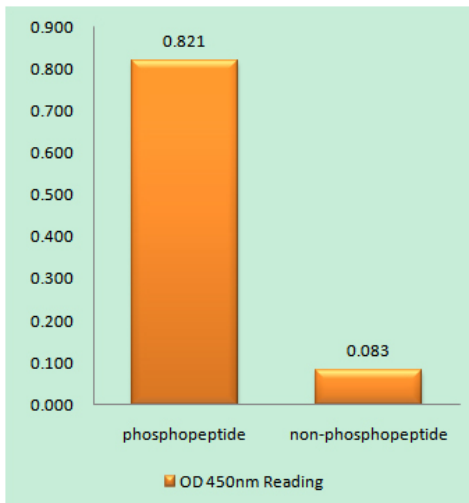
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

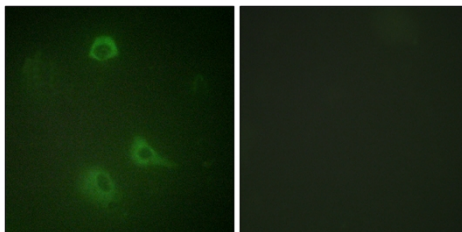
Products Images



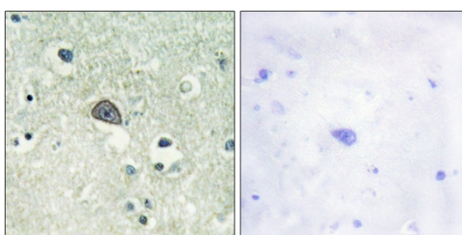
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



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