



NMDA ζ 1 (phospho Ser897) Polyclonal Antibody

Catalog No	YP-Ab-16345
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;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 Ser897. AA range:864-913
Specificity	Phospho-NMDA ζ 1 (S897) Polyclonal Antibody detects endogenous levels of NMDA ζ 1 protein only when phosphorylated at S897.
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	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
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	120kD
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],

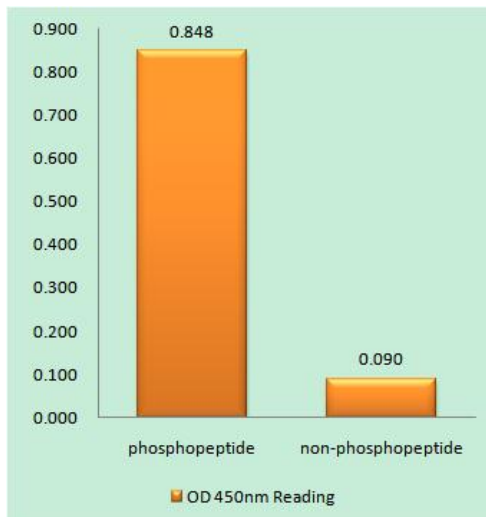
matters needing attention

Avoid repeated freezing and thawing!

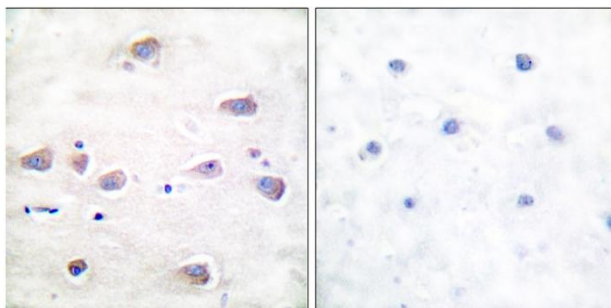
Usage suggestions

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

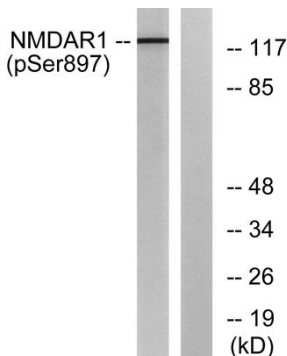
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using NMDAR1 (Phospho-Ser897) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using NMDAR1 (Phospho-Ser897) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from LOVO cells, using NMDAR1 (Phospho-Ser897) Antibody. The lane on the right is blocked with the phospho peptide.