

Product Name: NMDA ζ 1 (phospho Ser897) Rabbit Polyclonal Antibody**Catalog #: APRab05119**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	120kDa

Antigen Information

Gene Name	GRIN1
Alternative Names	GRIN1; NMDAR1; Glutamate [NMDA] receptor subunit zeta-1; N-methyl-D-aspartate receptor subunit NR1; NMD-R1
Gene ID	2902.0
SwissProt ID	Q05586
Immunogen	The antiserum was produced against synthesized peptide derived from human NMDAR1 around the phosphorylation site of Ser897. AA range:864-913

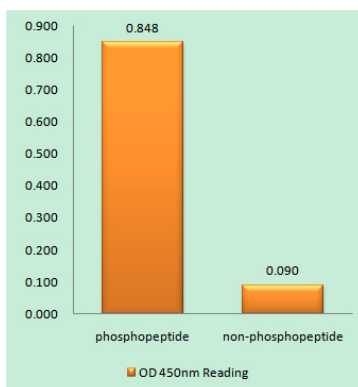
Background

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: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:Forms heteromeric channel of a zeta subunit (GRIN1), a epsilon subunit (GRIN2A, GRIN2B, GRIN2C or GRIN2D) and a third subunit (GRIN3A or GRIN3B); disulfide-linked. Found in a complex with GRIN2A or GRIN2B, GRIN3A or GRIN3B and PPP2CB. Interacts with DLG4 and MPDZ.,

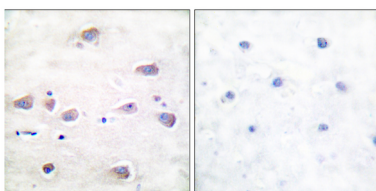
Research Area

Calcium;Neuroactive ligand-receptor interaction;Long-term potentiation;Alzheimer's disease;Amyotrophic lateral sclerosis (ALS);Huntington's disease;

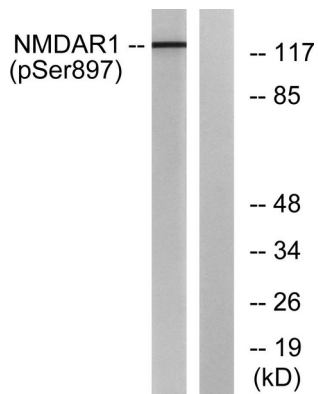
Image Data



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.