

NMDAζ1 Polyclonal Antibody

Catalog No: YT3158

Reactivity: Human; Mouse; Rat

Applications: WB;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

Q05586

P35438

Human Gene Id: 2902

Human Swiss Prot

No:

Mouse Gene Id: 14810

Mouse Swiss Prot

No:

Rat Gene ld: 24408

Rat Swiss Prot No: P35439

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

NMDAR1. AA range:856-905

Specificity: NMDAζ1 Polyclonal Antibody detects endogenous levels of NMDAζ1 protein.

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

1/4



Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. 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)

Observed Band: 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 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.

Expression: Brain, Cerebellum, Hippocampus,



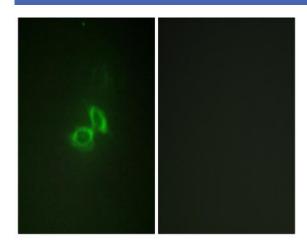
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No4: 1

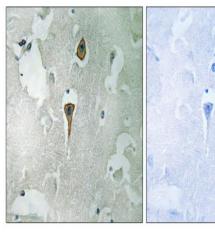
Host: Rabbit

Modifications: Unmodified

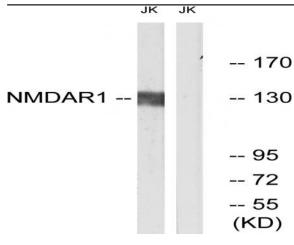
Products Images



Immunofluorescence analysis of NIH/3T3 cells, using NMDAR1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using NMDAR1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, using NMDAR1 Antibody. The lane on the right is blocked with the synthesized peptide.