

NMDA_E2 Polyclonal Antibody

Catalog No: YT3152

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: NMDAR2B

Fields: >>Ras signaling pathway;>>Rap1 signaling pathway;>>cAMP signaling

pathway;>>Neuroactive ligand-receptor interaction;>>Circadian

entrainment;>>Long-term potentiation;>>Glutamatergic synapse;>>Dopaminergic synapse;>>Alzheimer disease;>>Amyotrophic lateral sclerosis;>>Huntington

disease;>>Spinocerebellar ataxia;>>Prion disease;>>Pathways of

neurodegeneration - multiple diseases;>>Cocaine addiction;>>Amphetamine addiction;>>Nicotine addiction;>>Systemic lupus erythematosus

Gene Name: GRIN2B

Protein Name: Glutamate [NMDA] receptor subunit epsilon-2

Q01097

Human Gene Id: 2904

Human Swiss Prot Q13224

No:

Mouse Gene Id: 14812

Mouse Swiss Prot

No:

Rat Gene ld: 24410

Rat Swiss Prot No: Q00960

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

NMDAR2B. AA range:1435-1484

Specificity: NMDAs2 Polyclonal Antibody detects endogenous levels of NMDAs2 protein.

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

1/3



Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

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: 165kD

Cell Pathway: Neuroactive ligand-receptor interaction;Long-term potentiation;Alzheimer's

disease; Amyotrophic lateral sclerosis (ALS); Huntington's disease; Systemic lupus

erythematosus;

Background : N-methyl-D-aspartate (NMDA) receptors are a class of ionotropic glutamate

receptors. NMDA receptor channel has been shown to be involved in long-term potentiation, an activity-dependent increase in the efficiency of synaptic

transmission thought to underlie certain kinds of memory and learning. NMDA receptor channels are heteromers composed of three different subunits: NR1 (GRIN1), NR2 (GRIN2A, GRIN2B, GRIN2C, or GRIN2D) and NR3 (GRIN3A or GRIN3B). The NR2 subunit acts as the agonist binding site for glutamate. This

receptor is the predominant excitatory neurotransmitter receptor in the

mammalian brain. [provided by RefSeq, 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., similarity: Belongs to the glutamate-gated ion channel (TC 1.A.10) family., subunit: Forms heteromeric channel of a zeta subunit (GRIN1), a epsilon subunit (GRIN2A, GRIN2B, GRIN2C or GRIN2D) and a third subunit (GRIN3A or GRIN3B). Found in a complex with GRIN1 and GRIN3B. Found in a complex with GRIN1, GRIN3A and PPP2CB. Interacts with PDZ domains of INADL and DLG4.

Interacts with HIP1 (By similarity). Interacts with MAGI3.,tissue

specificity: Primarily found in the fronto-parieto-temporal cortex and hippocampus

pyramidal cells, lower expression in the basal ganglia.,

Subcellular Location : Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Late endosome. Lysosome. Cytoplasm, cytoskeleton. Co-localizes with the motor protein KIF17

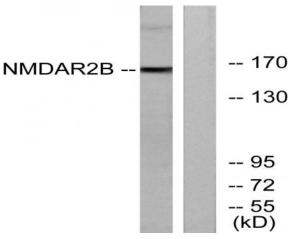
along microtubules...

Expression: Primarily found in the fronto-parieto-temporal cortex and hippocampus pyramidal

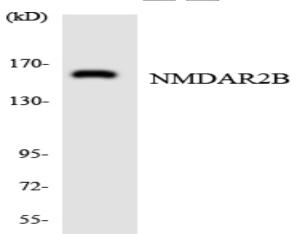
cells, lower expression in the basal ganglia.



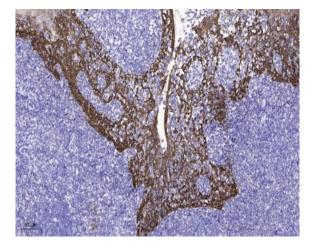




Western blot analysis of lysates from Jurkat cells, using NMDAR2B Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HUVECcells using NMDAR2B antibody.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).