



## Rabbit Anti-Phospho-NMDAR1 (Ser890) antibody

SL3301R

<b>Product Name:</b>	Phospho-NMDAR1 (Ser890)
<b>Chinese Name:</b>	磷酸化离子型谷氨酸受体1抗体
<b>Alias:</b>	NMDAR1 (phospho S890); p-NMDAR1 (phospho S890); NMDA-NR1; N-Methyl-d-Aspartate receptor 1; GRIN1; NMDA1; NR1; Glutamate [NMDA] receptor subunit zeta 1; Glutamate receptor ionotropic N methyl D aspartate 1; Grin 1; Grin1; N methyl D aspartate receptor channel; N-methyl-D-aspartate receptor; N-methyl-D-aspartate receptor subunit NR1; NMD-R1; NMDA 1; NMDA NR1; NMDA R1; NMDA receptor 1; NMDA1; NMDAR 1; NMDAR; NR 1; NMDZ1 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Cow,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	103kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated Synthesised phosphopeptide derived from human NMDAR1 around the phosphorylation site of Ser890:AS(p-S)F<Cytoplasmic>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>

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.

**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 (By similarity). Interacts with LRFN1 and LRFN2 (By similarity). Interacts with MYZAP.

**Subcellular Location:**

Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density.

**Post-translational modifications:**

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.

**DISEASE:**

Defects in GRIN1 are the cause of mental retardation autosomal dominant type 8 (MRD8) [MIM:614254]. Mental retardation is characterized by significantly below average general intellectual functioning associated with impairments in adaptive behavior and manifested during the developmental period.

**Similarity:**

Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. NR1/GRIN1 subfamily.

**SWISS:**

Q05586

**Gene ID:**

**Product Detail:**

2902

**Database links:**

[Entrez Gene: 2902](#) Human

[Entrez Gene: 14810](#) Mouse

[Entrez Gene: 24408](#) Rat

[Omim: 138249](#) Human

[SwissProt: Q05586](#) Human

[SwissProt: P35438](#) Mouse

[SwissProt: P35439](#) Rat

[Unigene: 558334](#) Human

[Unigene: 278672](#) Mouse

[Unigene: 9840](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

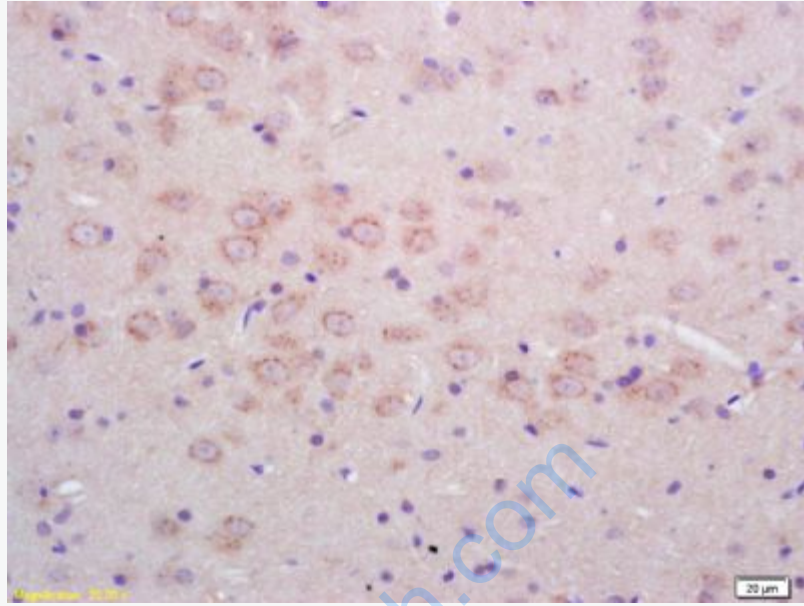
神经细胞Maker

????(NMDAR1)N-甲基-D-

天门冬氨酸受体(NMDAR)是兴奋性氨基酸受体亚型之一,是由NMDAR1与不同的NMDAR2亚基组成的异聚体。

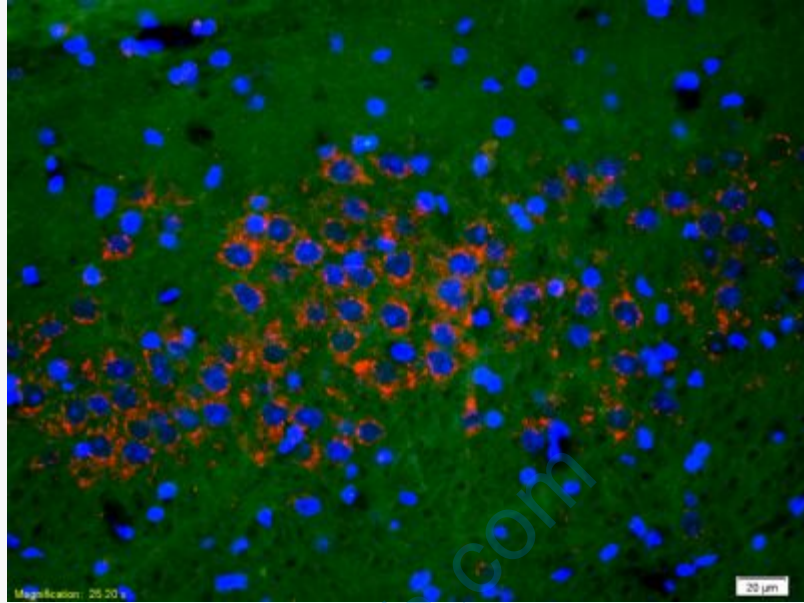
????NMDAR1又称GluR1 (Glutamate Receptor

1)近年实验研究发现,许多NMDAR拮抗药均具有镇痛活性,表明NMDAR在痛觉传递中具有重要作用,这为新型镇痛药的研究开发提供了新的作用靶点。



**Picture:**

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-Phospho-NMDAR1(Ser890) Polyclonal Antibody, Unconjugated(SL3301R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min;  
Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-Phospho-NMDAR1(Ser890) Polyclonal Antibody,  
Unconjugated(SL3301R) 1:200, overnight at 4°C; The secondary antibody was Goat  
Anti-Rabbit IgG, Cy3 conjugated (SL3301R)used at 1:200 dilution for 40 minutes at  
37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei