



Rabbit Anti-NMDAR2B antibody

SL0222R

Product Name:	NMDAR2B
Chinese Name:	谷氨酸受体2B抗体
Alias:	NMDA2B (epsilon 2); GRIN 2B; GRIN2B; hNR 3; hNR3; MGC142178; MGC142180; N methyl D aspartate receptor channel subunit epsilon 2; N METHYL D ASPARTATE RECEPTOR CHANNEL SUBUNIT EPSILON 2; N methyl D aspartate receptor subtype 2B; N methyl D aspartate receptor subunit 2B; N methyl D aspartate receptor subunit 3; NMDA NR2B; NMDA R2B; Nmdar2b; NMDE2; NME2; NR2B; NR3; N-Methyl-d-Asprtate receptor 2B; AW490526; Glutamate [NMDA] receptor subunit epsilon 2; Glutamate Receptor Ionotropic N Methyl D Aspartate 2B; Glutamate Receptor Ionotropic N Methyl D Aspartate subunit 2B; Glutamate receptor ionotropic NMDA2B; Glutamate receptor subunit epsilon 2; Glutamate receptor, ionotropic; NMDE2 HUMAN; glutamate receptor ionotropic, NMDA 2B precursor.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	163kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NMDAR2B:451-550/1484<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	PubMed
Product Detail:	<p>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].</p> <p>Function: NMDA receptor subtype of glutamate-gated ion channels with high calcium permeability and voltage-dependent sensitivity to magnesium. Mediated by glycine. In concert with DAPK1 at extrasynaptic sites, acts as a central mediator for stroke damage. Its phosphorylation at Ser-1303 by DAPK1 enhances synaptic NMDA receptor channel activity inducing injurious Ca²⁺ influx through them, resulting in an irreversible neuronal death.</p> <p>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 and NETO1 (By similarity). Interacts with MAGI3. Interacts with DAPK1.</p> <p>Subcellular Location: Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane, Multi-pass membrane protein.</p> <p>Tissue Specificity: Primarily found in the fronto-parieto-temporal cortex and hippocampus pyramidal cells, lower expression in the basal ganglia.</p> <p>Post-translational modifications: Phosphorylation at Ser-1303 by DAPK1 enhances synaptic NMDA receptor channel activity.</p> <p>DISEASE: Defects in GRIN2B are the cause of mental retardation autosomal dominant type 6 (MRD6) [MIM:613970]. Mental retardation is characterized by significantly below average general intellectual functioning associated with impairments in adaptive behavior and manifested during the developmental period. Note=Chromosomal aberrations involving GRIN2B have been found in patients with mental retardation. Translocations t(9;12)(p23;p13.1) and t(10;12)(q21.1;p13.1) with a common breakpoint</p>

in 12p13.1.

Similarity:

Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. NR2B/GRIN2B subfamily.

SWISS:

Q13224

Gene ID:

2904

Database links:

[Entrez Gene: 2904](#)Human

[Entrez Gene: 14812](#)Mouse

[Entrez Gene: 24410](#)Rat

[Omim: 138252](#)Human

[SwissProt: Q5R1P3](#)Dog

[SwissProt: Q13224](#)Human

[SwissProt: Q01097](#)Mouse

[SwissProt: Q00960](#)Rat

[Unigene: 654430](#)Human

[Unigene: 436649](#)Mouse

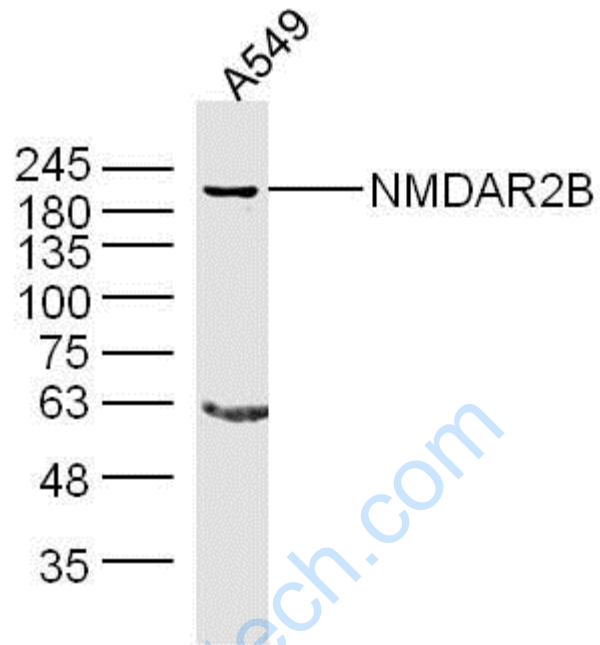
[Unigene: 9711](#)Rat

Important Note:

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

谷氨酸受体(NR2B)是脊椎动物中枢神经系统兴奋型神经传递的主要介质。在突触可塑性极大脑学习及记忆功能方面起关键作用。

Picture:



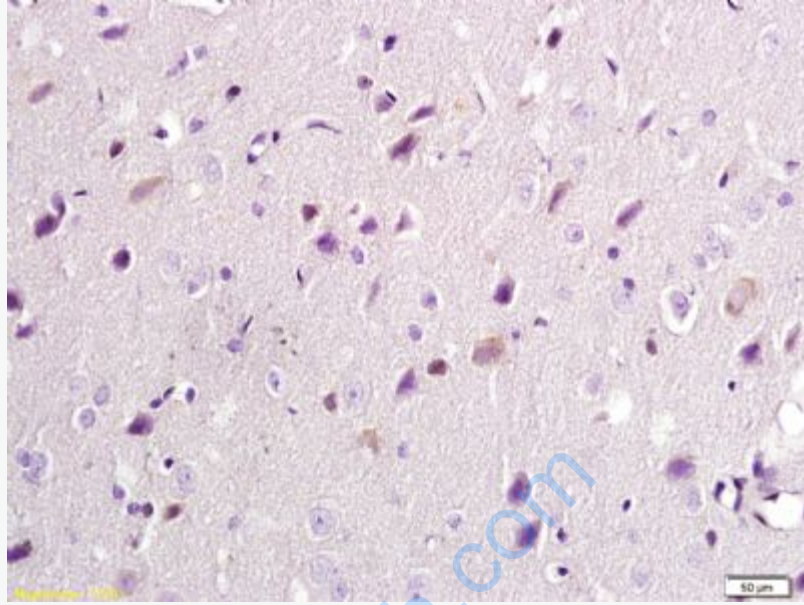
Sample: A549 Cell Lysate at 40 ug

Primary: Anti- NMDAR2B (SL0222R) at 1/300 dilution

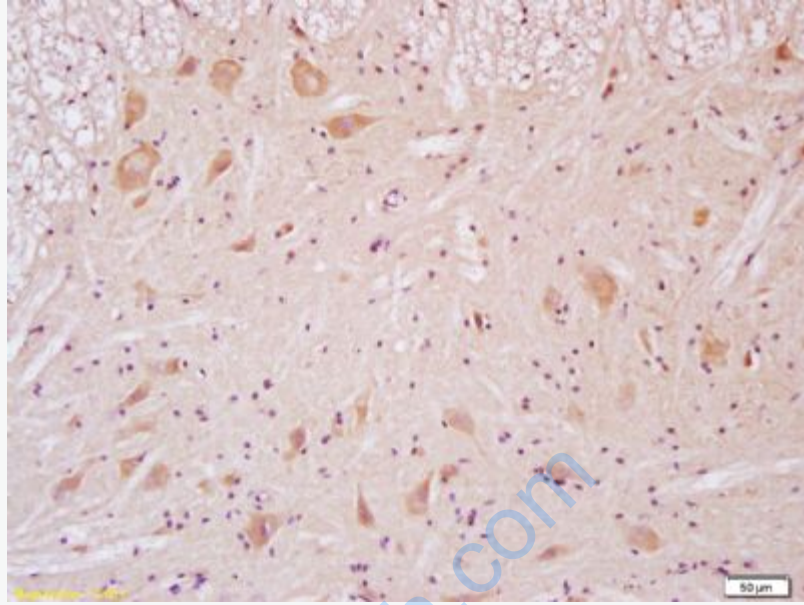
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 163 kD

Observed band size: 210 kD



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-NR2B/NMDAR2B Polyclonal Antibody, Unconjugated(SL0222R) 1:300, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat spinal cord; 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-NR2B/NMDAR2B Polyclonal Antibody, Unconjugated(SL0222R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat brain tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
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-NR2B/NMDAR2B Polyclonal Antibody, Unconjugated(SL0222R)
1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, FITC
conjugated(SL0222R)used at 1:200 dilution for 40 minutes at 37°C.