

GRIN2B Antibody (C-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21859b**Specification**

GRIN2B Antibody (C-Term) - Product Information

Application	WB,E
Primary Accession	Q13224
Other Accession	Q01097 , Q00960
Reactivity	Mouse
Predicted	Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	166367

GRIN2B Antibody (C-Term) - Additional Information**Gene ID** 2904**Other Names**

Glutamate receptor ionotropic, NMDA 2B, GluN2B, Glutamate [NMDA] receptor subunit epsilon-2, N-methyl D-aspartate receptor subtype 2B, NMDAR2B, NR2B, N-methyl-D-aspartate receptor subunit 3, NR3, hNR3, GRIN2B, NMDAR2B

Target/Specificity

This GRIN2B antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1300-1332 amino acids from human GRIN2B.

Dilution

WB~~1:500

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GRIN2B Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

GRIN2B Antibody (C-Term) - Protein Information**Name** GRIN2B {ECO:0000303|Ref.3, ECO:0000312|HGNC:HGNC:4586}

Function Component of N-methyl-D-aspartate (NMDA) receptors (NMDARs) that function as heterotetrameric, ligand-gated cation channels with high calcium permeability and voltage-dependent block by $Mg(2+)$ (PubMed:[24272827](#), PubMed:[24863970](#), PubMed:[26875626](#), PubMed:[26919761](#), PubMed:[27839871](#), PubMed:[28095420](#), PubMed:[28126851](#), PubMed:[38538865](#), PubMed:[8768735](#)). Participates in synaptic plasticity for learning and memory formation by contributing to the long-term depression (LTD) of hippocampus membrane currents (By similarity). Channel activation requires binding of the neurotransmitter L-glutamate to the GluN2 subunit, glycine or D-serine binding to the GluN1 subunit, plus membrane depolarization to eliminate channel inhibition by $Mg(2+)$ (PubMed:[24272827](#), PubMed:[24863970](#), PubMed:[26875626](#), PubMed:[26919761](#), PubMed:[27839871](#), PubMed:[28095420](#), PubMed:[28126851](#), PubMed:[38538865](#), PubMed:[8768735](#)). NMDARs mediate simultaneously the potassium efflux and the influx of calcium and sodium (By similarity). Each GluN2 subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, $Ca2(+)$ permeability, and binding to allosteric modulators (PubMed:[26875626](#), PubMed:[28095420](#), PubMed:[28126851](#), PubMed:[38538865](#), PubMed:[8768735](#)). 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 (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q00960}; Multi-pass membrane protein. Cell projection, dendrite. Late endosome {ECO:0000250|UniProtKB:Q01097}. Lysosome {ECO:0000250|UniProtKB:Q01097}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q01097}. Note=Co-localizes with the motor protein KIF17 along microtubules. {ECO:0000250|UniProtKB:Q01097}

Tissue Location

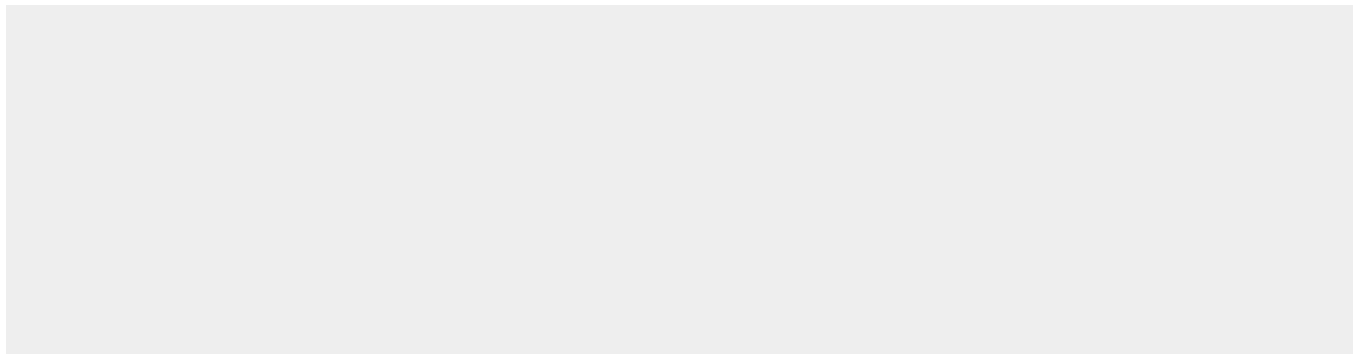
Primarily found in the fronto-parieto-temporal cortex and hippocampus pyramidal cells, lower expression in the basal ganglia.

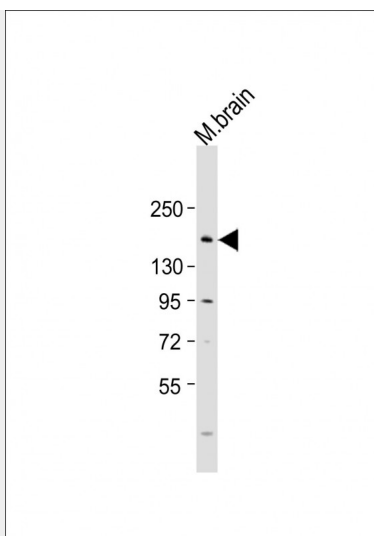
GRIN2B Antibody (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GRIN2B Antibody (C-Term) - Images





Anti-GRIN2B Antibody (C-Term) at 1:500 dilution + mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 166 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

GRIN2B Antibody (C-Term) - Background

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 (By similarity).

GRIN2B Antibody (C-Term) - References

Adams S.L.,et al.Biochim. Biophys. Acta 1260:105-108(1995).
Hess S.D.,et al.J. Pharmacol. Exp. Ther. 278:808-816(1996).
Mandich P.,et al.Submitted (FEB-1997) to the EMBL/GenBank/DDBJ databases.
Mandich P.,et al.Genomics 22:216-218(1994).
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