

# GRIN3B Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12291b

### **Product Information**

**Application** WB, IHC-P, E **Primary Accession** 060391 **Other Accession** NP 619635.1 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB31054 Calculated MW 112992 904-933 **Antigen Region** 

### **Additional Information**

**Gene ID** 116444

Other Names Glutamate receptor ionotropic, NMDA 3B, GluN3B, N-methyl-D-aspartate

receptor subtype 3B, NMDAR3B, NR3B, GRIN3B

Target/Specificity This GRIN3B antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 904-933 amino acids from the

C-terminal region of human GRIN3B.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 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** GRIN3B Antibody (C-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

### **Protein Information**

Name GRIN3B ( HGNC:16768)

**Function** Component of a non-conventional N-methyl-D-aspartate (NMDA) receptors

(NMDARs) that function as heterotetrameric, ligand-gated cation channels with low calcium permeability and low voltage-dependent block by Mg(2+) (By

similarity). Forms glutamatergic receptor complexes with GluN1 and GluN2 subunits which are activated by glycine binding to the GluN1 and GluN3 subunits and L-glutamate binding to GluN2 subunits (By similarity). Forms excitatory glycinergic receptor complexes with GluN1 alone which are activated by glycine binding to the GluN1 and GluN3 subunits. GluN3B subunit also binds D-serine and, in the absence of glycine, activates glycinergic receptor complexes, but with lower efficacy than glycine (By similarity). Each GluN3 subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, Ca2(+) permeability, and binding to allosteric modulators (By similarity).

#### **Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:Q91ZU9}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q13224} Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q91ZU9} Note=Requires the presence of GRIN1 to be targeted at the plasma membrane. {ECO:0000250|UniProtKB:Q91ZU9}

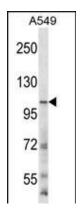
## **Background**

GRIN3B is a NMDA receptor subtype of glutamate-gated ion channels with reduced single-channel conductance, low calcium permeability and low voltage-dependent sensitivity to magnesium. It is mediated by glycine.

### References

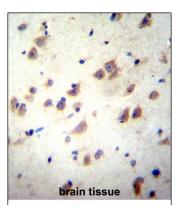
Sedaghati, M., et al. Eur. J. Pharmacol. 633 (1-3), 50-54 (2010): Saus, E., et al. J Psychiatr Res (2010) In press: Need, A.C., et al. Eur. J. Hum. Genet. 17(7):946-957(2009) Liu, H.P., et al. Dement Geriatr Cogn Disord 28(6):521-527(2009) Niemann, S., et al. Neurology 70(9):666-676(2008)

# **Images**



GRIN3B Antibody (C-term) (Cat. #AP12291b) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the GRIN3B antibody detected the GRIN3B protein (arrow).

GRIN3B Antibody (C-term) (Cat. #AP12291b)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GRIN3B Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



# **Citations**

• A Naturally Occurring Null Variant of the NMDA Type Glutamate Receptor NR3B Subunit Is a Risk Factor of Schizophrenia.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.