For Research Use Only

NMDAR2B/GRIN2B Polyclonal antibody

Catalog Number:21920-1-AP Featured Product 109 Publications

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Basic Information

Catalog Number:
21920-1-AP

Concentration:
550 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG16318

GenBank Accession Number:
BC113620

GeneID (NCBI):
2904

UNIPROT ID:
Q13224

Full Name:
glutamate receptor, ionotropic, N-methyl D-aspartate 2B

Calculated MW:
1484 aa, 166 kDa

Observed MW:
166 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:4000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF-P 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF-P, FC (Intra), IP, ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, zebra finch

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse brain tissue, human brain tissue, rat brain tissue

IP : mouse brain tissue,

IHC : mouse brain tissue, human brain tissue

IF-P : mouse brain tissue,

Background Information

GRIN2B (also known as GluN2B or NMDAR2B) is a member of the N-methyl-D-aspartate (NMDA) receptor family within the ionotropic glutamate receptor superfamily. NMDA receptors are widely expressed in the central nervous system and play a major role in excitatory synaptic transmission and plasticity (PMID: 23223336). NMDA receptors large multi-subunit complexes arranged into heteromeric assemblies composed of four homologous subunits within a repertoire of over 10 different subunits: eight GluN1 isoforms, four GluN2 subunits (A-D) and two GluN3 subunits (A and B) (PMID: 21395862). Naturally occurring mutations within GRIN2B gene are associated with neurodevelopmental disorders including autism spectrum disorder, attention deficit hyperactivity disorder, epilepsy, and schizophrenia.

Notable Publications

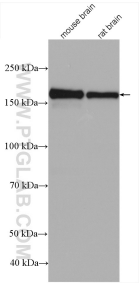
Author	Pubmed ID	Journal	Application
Pengcheng Ma	36179027	Sci Adv	WB
Xin Peng	34549339	J Mol Neurosci	WB
Qingyang Zhang	34551807	Mol Neurodegener	WB

Storage

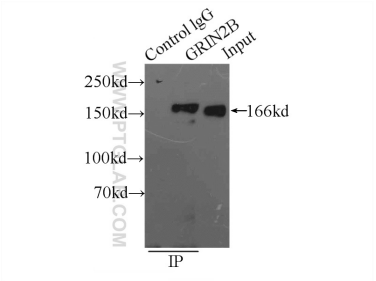
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

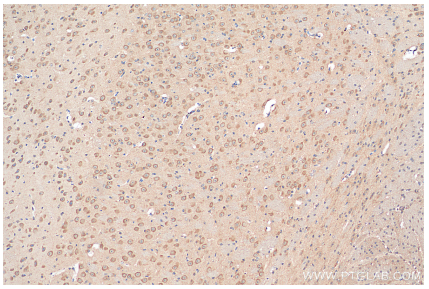
Selected Validation Data



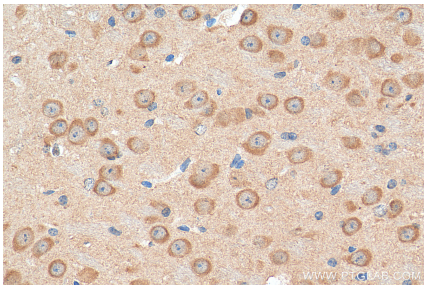
mouse brain tissue were subjected to SDS PAGE followed by western blot with 21920-1-AP (NMDAR2B/GRIN2B antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



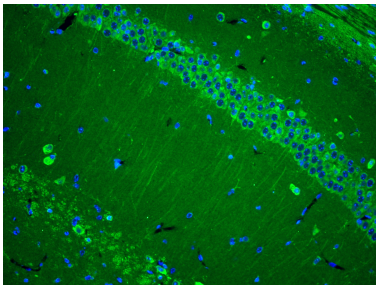
IP result of anti-NMDAR2B/GRIN2B (IP:21920-1-AP, 3ug; Detection:21920-1-AP 1:2000) with mouse brain tissue lysate 6000ug.



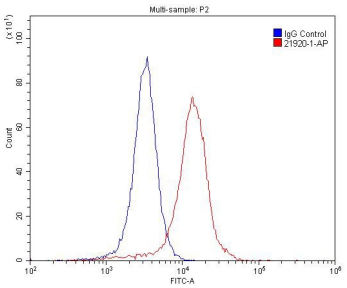
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21920-1-AP (NMDAR2B/GRIN2B antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21920-1-AP (NMDAR2B/GRIN2B antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using NMDAR2B/GRIN2B antibody (21920-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



1X10^6 SH-SY5Y cells were stained with 0.2ug NMDAR2B/GRIN2B antibody (21920-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.