For Research Use Only

NMDAR2A/GRIN2A Polyclonal antibody

Catalog Number:28525-1-AP 9 Publications

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Basic Information

Catalog Number:
28525-1-AP

Size:
780 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG29101

GenBank Accession Number:
NM_000833

GeneID (NCBI):
2903

UNIPROT ID:
Q12879

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

Calculated MW:
165 kDa

Observed MW:
160-180 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:6000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500

Applications

Tested Applications:
WB, IP, IHC, ELISA

Cited Applications:
WB, IF

Species Specificity:
mouse, rat

Cited Species:
human, mouse, rat

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, rat brain tissue

IP : rat brain tissue,

IHC : mouse brain tissue,

Background Information

GRIN2A (glutamate ionotropic receptor NMDA type subunit 2A), also known as NMDAR2A. And its molecular weight is 165 kDa. GRIN2A is located in cell projection, dendritic spine, cell membrane, synapse, postsynaptic cell membrae, cytolamic vesicle membrane, which is expressed in many tissues, highest expression in brain and heart. This gene encodes a member of the glutamate-gated ion channel protein family. The encoded protein is an N-methyl-D-aspartate (NMDA) receptor subunit. NMDA receptors are both ligand-gated and voltage-dependent, and are involved in long-term potentiation, an activity-dependent increase in the efficiency of synaptic transmission thought to underlie certain kinds of memory and learning. These receptors are permeable to calcium ions, and activation results in a calcium influx into post-synaptic cells, which results in the activation of several signaling cascades. Disruption of this gene is associated with focal epilepsy and speech disorder with or without cognitive disability. Alternative splicing results in multiple transcript variants.

Notable Publications

Author	Pubmed ID	Journal	Application
Kangyu Jin	36103758	Psychiatry Res	WB
Jie Du	36483743	Front Pharmacol	WB
XiaoHuan Liu	35340131	Andrology	WB

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
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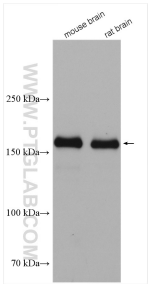
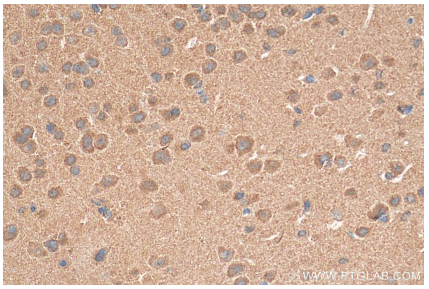
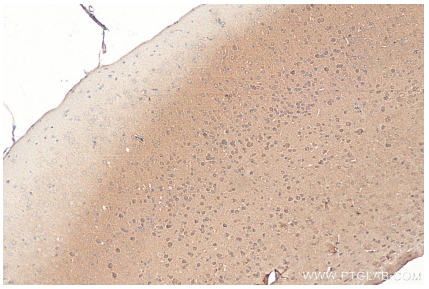
Selected Validation Data



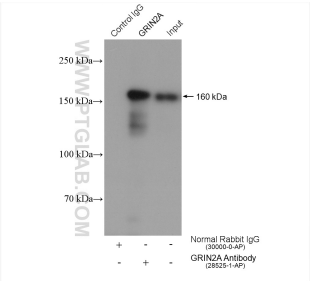
Various lysates were subjected to SDS PAGE followed by western blot with 28525-1-AP (NMDAR2A/GRIN2A antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 28525-1-AP (NMDAR2A/GRIN2A antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 28525-1-AP (NMDAR2A/GRIN2A antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-NMDAR2A/GRIN2A (IP:28525-1-AP, 4ug; Detection:28525-1-AP 1:4000) with rat brain tissue lysate 1120 ug.