For Research Use Only

NMDAR1/GRIN1 Polyclonal antibody

Catalog Number:27232-1-AP

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
27232-1-AP

Size:
400 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG26093

GenBank Accession Number:
NM_000832

GeneID (NCBI):
2902

UNIPROT ID:
Q05586

Full Name:
glutamate receptor, ionotropic, N-methyl D-aspartate 1

Calculated MW:
105 kDa

Observed MW:
116-120 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
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, IP, ELISA

Species Specificity:
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, mouse cerebellum tissue

IF-P : rat brain tissue,

Background Information

GRIN1 encodes subunit 1 of the N-methyl-D-aspartate (NMDA) receptor, which is a heteromeric glutamate-gated calcium ion channel essential for synaptic function in the brain (PMID: 25864721, PMID: 25864721). NMDARs play important roles in normal brain development and function, such as synaptic plasticity, neural development, learning and memory (PMID: 20716669). NMDAR dysfunction has been associated with several neurological disorders including Parkinson, Alzheimer and Huntington diseases. Disrupted motor learning and long-term synaptic plasticity in mice lacking NMDAR1 in the striatum (PMID: 17015831).

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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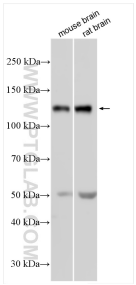
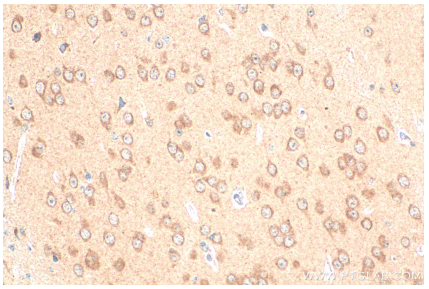
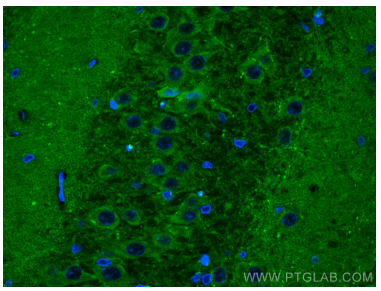
Selected Validation Data



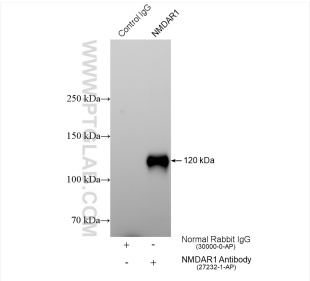
Various lysates were subjected to SDS PAGE followed by western blot with 27232-1-AP (NMDAR1/GRIN1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



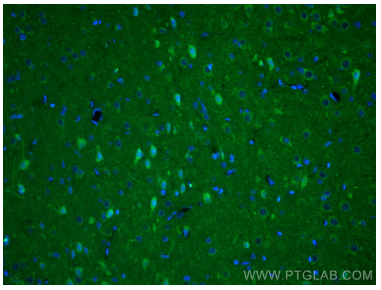
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 27232-1-AP (NMDAR1/GRIN1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using NMDAR1/GRIN1 antibody (27232-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-NMDAR1/GRIN1 (IP:27232-1-AP, 4ug; Detection:27232-1-AP 1:400) with rat brain tissue lysate 1120 ug.



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