## For Research Use Only

## NMDAR1/GRIN1 Polyclonal antibody

Catalog Number: 27232-1-AP



**Basic Information** 

Catalog Number: GenBank Accession Number:

27232-1-AP NM 000832 GeneID (NCBI): Size:

150ul, Concentration: 400 ug/ml by

Nanodrop: **UNIPROT ID:** Q05586 Rabbit Full Name:

Isotype: glutamate receptor, ionotropic, N-

methyl D-aspartate 1 IgG Immunogen Catalog Number: Calculated MW:

AG26093 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.

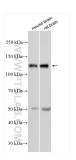
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

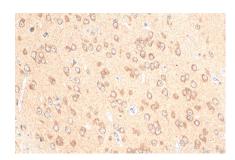
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

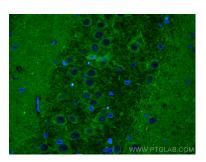
## **Selected Validation Data**



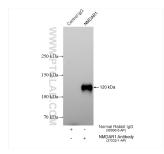
Various lysates were subjected to SDS PAGE followed by western blot with 27232-1-AP (NMDAR1/GRIN1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



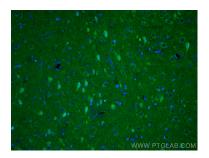
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 27232-1-AP (NMDAR1/GRIN1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.



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).