

For Research Use Only

# GAD1 Polyclonal antibody

Catalog Number: 10408-1-AP

Featured Product

31 Publications



## Basic Information

### Catalog Number:

10408-1-AP

### Concentration:

600 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0666

### GenBank Accession Number:

BC002815

### GeneID (NCBI):

2571

### UNIPROT ID:

Q99259

### Full Name:

glutamate decarboxylase 1 (brain,

67kDa)

### Calculated MW:

67 kDa

### Observed MW:

67 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:5000-1:50000

IP: 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC: 1:200-1:800

IF-Fro: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF-Fro, IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

WB : mouse brain tissue, rat brain tissue

IP : mouse brain tissue,

IHC : mouse brain tissue, mouse cerebellum tissue

IF-Fro : mouse brain tissue,

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

## Background Information

The GAD1 (glutamate decarboxylase 1) gene encodes 67 kDa glutamic acid decarboxylase isoform (GAD67), the rate-limiting enzyme responsible for  $\gamma$ -aminobutyric acid (GABA) biosynthesis from glutamic acid and the major GAD isoform in the human brain for early brain development (PMID:21302352). It is also potentially involved in variety of skin activities. It belongs to the group II decarboxylase family.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yifei Xu	36120289	Front Pharmacol	WB
Lei Wu	33044778	Phytother Res	WB
Michail S Kukharsky	32467583	Transl Psychiatry	

## 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:

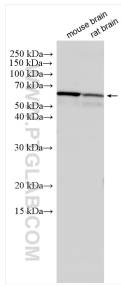
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

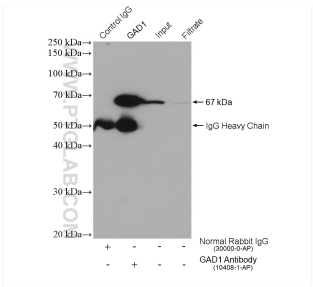
W: [ptgcn.com](http://ptgcn.com)

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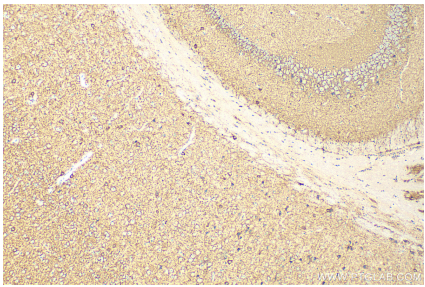
Selected Validation Data



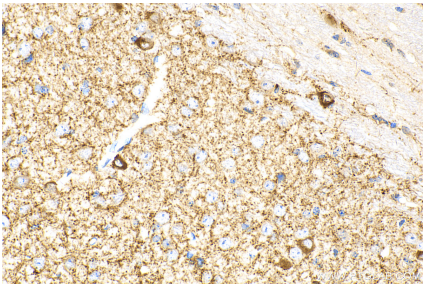
Various lysates were subjected to SDS PAGE followed by western blot with 10408-1-AP (GAD1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



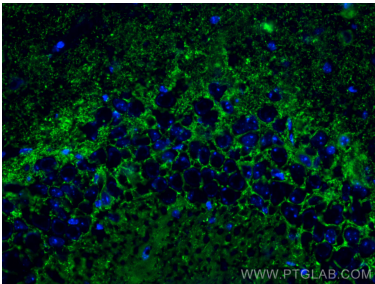
IP result of anti-GAD1 (IP:10408-1-AP, 4ug; Detection:10408-1-AP 1:500) with mouse brain tissue lysate 1920 ug.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 10408-1-AP (GAD1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 10408-1-AP (GAD1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using GAD1 antibody (10408-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).