

# GAD1 Polyclonal antibody

Catalog Number: 10408-1-AP

Featured Product

24 Publications

## Basic Information

## Catalog Number:

10408-1-AP

## Size:

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 1:50-1:500

## Applications

## Tested Applications:

WB, IP, IF-Fro, IHC, ELISA

## Cited Applications:

WB, IF, IHC

## Species Specificity:

human, mouse, rat

## Cited Species:

human, rat, mouse

**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 : mouse brain tissue,

IHC : mouse brain tissue,

IF : mouse brain tissue,

## Background Information

The GAD1(glutamate decarboxylase 1) gene encodes 67 kDa glutamic acid decarboxylase isoform (GAD67), the rate-limiting enzyme responsible for γ-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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

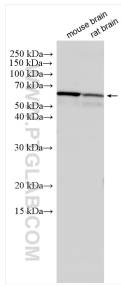
For technical support and original validation data for this product please contact:

T: 4006900926

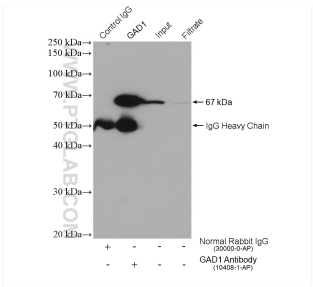
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech  
Group brand and is not available to purchase from any  
other manufacturer.**

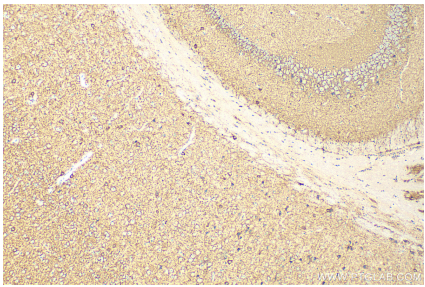
Selected Validation Data



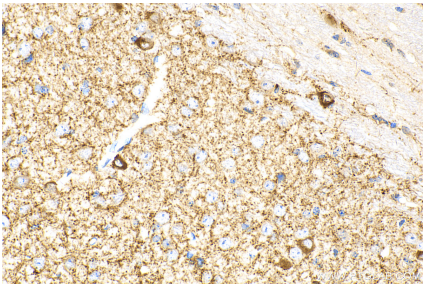
Various lysates were subjected to SDS PAGE followed by western blot with 10408-1-AP (GAD1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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 fixed using GAD1 antibody (10408-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).