

For Research Use Only

# GAD65 Polyclonal antibody

Catalog Number: 21760-1-AP

4 Publications



## Basic Information

### Catalog Number:

21760-1-AP

### Size:

150ul, Concentration: 400 µg/ml by Nanodrop and 267 µg/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG16251

### GenBank Accession Number:

BC126327

### GeneID (NCBI):

2572

### Full Name:

glutamate decarboxylase 2 (pancreatic islets and brain, 65kDa)

### Calculated MW:

585 aa, 65 kDa

### Observed MW:

65 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:100-1:3000

IP 0.5-4.0 µg for IP and 1:200-1:1000 for WB

IHC 1:200-1:500

IF 1:200-1:800

## Applications

### Tested Applications:

IF, IHC, IP, WB, ELISA

### Cited Applications:

WB

### Species Specificity:

human, mouse, rat

### Cited Species:

human, 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, mouse cerebellum tissue, rat brain brain tissue

IP: rat brain tissue,

IHC: mouse brain tissue, human colon tissue

IF: HeLa cells, mouse brain tissue

## Background Information

GAD2, also named as GAD65, belongs to the group II decarboxylase family. GAD2 catalyzes the production of GABA. It is responsible for the synthesis of the essential neurotransmitter gamma-aminobutyric acid (GABA) from L-glutamic acid. GAD2 is expressed in nervous and endocrine systems and are thought to be involved in synaptic transmission and INS secretion. Autoantibodies against GAD2 may serve as markers for type I diabetes. Many individuals suffering from an adult onset disorder known as Stiff Person Syndrome (SPS) also express autoantibodies to GAD2. The antibody is specific to GAD2.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yue Li	29031852	Neuropharmacology	WB
Mehdi Eshraghi	32426479	Sci Adv	WB
Sitong Li	35288204	Neurosci Lett	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

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

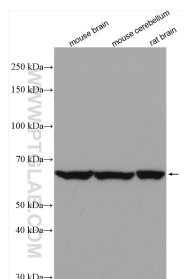
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

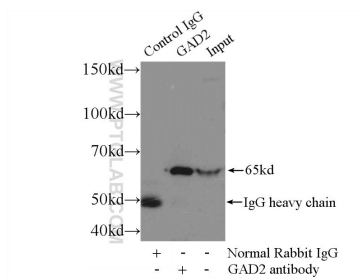
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

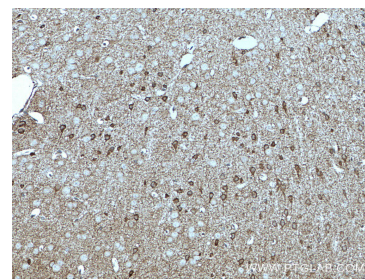
## Selected Validation Data



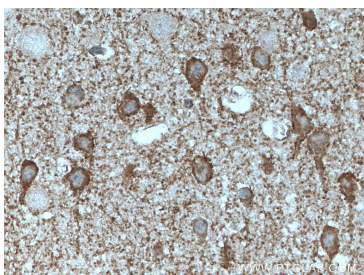
Various lysates were subjected to SDS PAGE followed by western blot with 21760-1-AP (GAD65 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



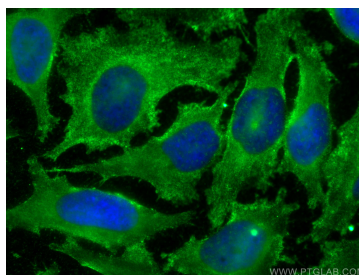
IP Result of anti-GAD65 (IP: 21760-1-AP, 3ug; Detection: 21760-1-AP 1:300) with rat brain tissue lysate 4000ug.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21760-1-AP (GAD65 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21760-1-AP (GAD65 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using GAD65 antibody (21760-1-AP) at dilution of 1:400 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).