

For Research Use Only

# GAD1 Monoclonal antibody

Catalog Number: 67648-1-Ig **4 Publications**



## Basic Information

<b>Catalog Number:</b> 67648-1-Ig	<b>GenBank Accession Number:</b> BC002815	<b>Purification Method:</b> Protein A purification
<b>Concentration:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 2571	<b>CloneNo.:</b> 2D5B7
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q99259	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000 IF-P 1:200-1:800
<b>Isotype:</b> IgG2a	<b>Full Name:</b> glutamate decarboxylase 1 (brain, 67kDa)	
<b>Immunogen Catalog Number:</b> AG21336	<b>Calculated MW:</b> 67 kDa	
	<b>Observed MW:</b> 67 kDa, 57 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IF	<b>WB :</b> pig brain tissue, rat brain tissue, mouse cerebellum tissue, pig cerebellum tissue, rabbit brain tissue, rabbit cerebellum tissue, rat cerebellum tissue, mouse brain tissue
<b>Species Specificity:</b> human, mouse, rat, pig, rabbit	<b>IHC :</b> rat cerebellum tissue, mouse cerebellum tissue
<b>Cited Species:</b> human, mouse	<b>IF-P :</b> rat brain tissue,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

GAD1, also named as GAD67, belongs to the group II decarboxylase family. GAD1 is 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Mengjie Qi	39480623	Biol Trace Elem Res	WB
Rong-Xin Song	38513970	Exp Neurol	IF
Yanbing Kao	38201271	Cells	WB,IF

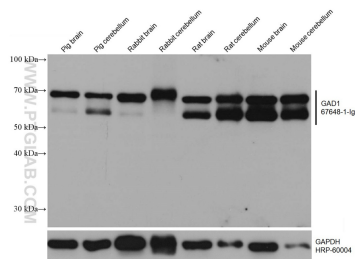
## Storage

**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

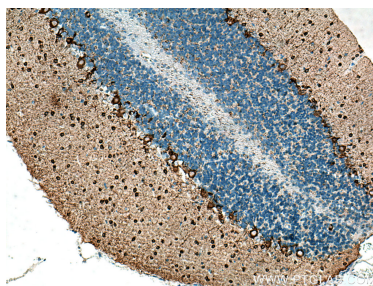
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

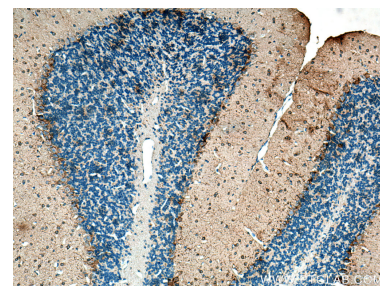
## Selected Validation Data



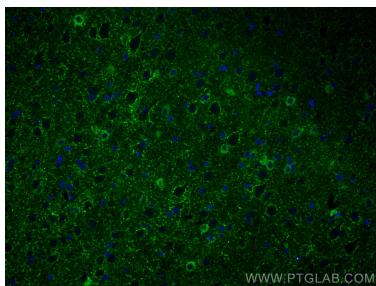
Various lysates were subjected to SDS PAGE followed by western blot with 67648-1-Ig (GAD1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue slide using 67648-1-Ig (GAD1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 67648-1-Ig (GAD1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using GAD1 antibody (67648-1-Ig, Clone: 2D5B7) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).