### For Research Use Only

# GAD1 Monoclonal antibody

Catalog Number:67648-1-lg 5 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

67648-1-Ig BC002815 Protein A purification
Size: GeneID (NCBI): CloneNo.:

150ul , Concentration: 1000 ug/ml by 2571 2D5B7

Nanodrop; UNIPROT ID:
Source: Q99259
Mouse Full Name:

Isotype: glutamate decarboxylase 1 (brain,

IgG2a 67kDa)

Immunogen Catalog Number: Calculated MW: AG21336 67 kDa

Observed MW: 67 kDa, 57 kDa

**Applications** 

Tested Applications: WB, IHC, IF-P, ELISA

Cited Applications:

Species Specificity:

human, mouse, rat, pig, rabbit

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: pig brain tissue, rat brain tissue, mouse cerebellum tissue, pig cerebellum tissue, rabbit brain tissue, rabbit cerebellum tissue, rat cerebellum tissue,

**Purification Method:** 

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:500-1:2000

IF-P: 1:200-1:800

mouse brain tissue

IHC: rat cerebellum tissue, mouse cerebellum tissue

IF-P: rat brain tissue,

## **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 glutamatic 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
Li Li	39740661	Dev Cell	WB
Mengjie Qi	39480623	Biol Trace Elem Res	WB
Rong-Xin Song	38513970	Exp Neurol	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

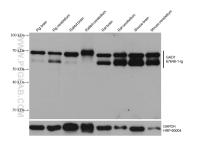
\*\*\* 20ul sizes contain 0.1% BSA

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

## **Selected Validation Data**



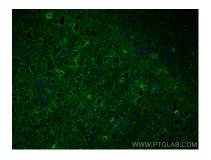
Various lysates were subjected to SDS PAGE followed by western blot with 67648-1-lg (GAD1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control



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



Immunohistochemical analysis of paraffinembedded 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 (67648-1-1g, Clone: 2D5B7) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).