

GAD67/GAD1 Rabbit mAb

Catalog No.: A28830 **Recombinant**

Basic Information

Observed MW

67 kDa

Calculated MW

67 kDa/25 kDa/47 kDa

Category

Primary antibody

Applications

WB,IP,IF-F,IF-P,IHC-P,ELISA

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC82653

Background

This gene encodes one of several forms of glutamic acid decarboxylase, identified as a major autoantigen in insulin-dependent diabetes. The enzyme encoded is responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. A pathogenic role for this enzyme has been identified in the human pancreas since it has been identified as an autoantigen and an autoreactive T cell target in insulin-dependent diabetes. This gene may also play a role in the stiff man syndrome. Deficiency in this enzyme has been shown to lead to pyridoxine dependency with seizures. Alternative splicing of this gene results in two products, the predominant 67-kD form and a less-frequent 25-kD form.

Recommended Dilutions

WB 1:2000 - 1:15000

IP 0.5 µg - 4 µg antibody for
400 µg - 600 µg extracts
of whole cells

IF-F 1:200 - 1:400

IF-P 1:200 - 1:400

IHC-P 1:400 - 1:1600

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions ($\geq 1:10000$) a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID

2571

Swiss Prot

Q99259

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

GAD; SCP; CPSQ1; DEE89; GAD67/GAD1

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

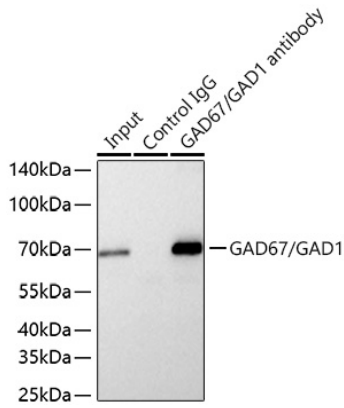
Contact

 | 400-999-6126

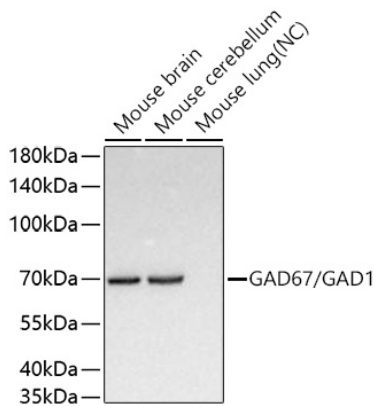
 | cn.market@abclonal.com.cn

 | www.abclonal.com.cn

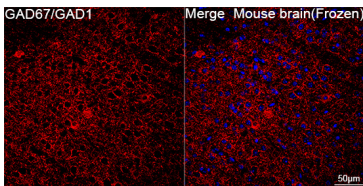
Validation Data



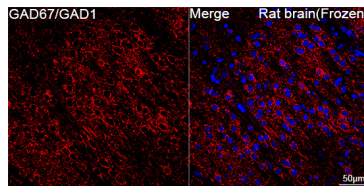
Immunoprecipitation of GAD67/GAD1 from 600 µg extracts of Mouse brain tissue was performed using 2 µg of GAD67/GAD1 Rabbit mAb (A28830). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using GAD67/GAD1 Rabbit mAb (A28830) at a dilution of 1:5000.



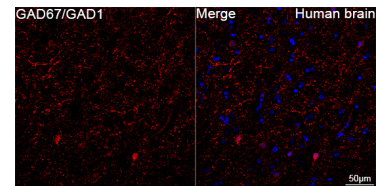
Western blot analysis of various lysates using GAD67/GAD1 Rabbit mAb (A28830) at 1:5000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Negative control (NC): Mouse lung. Exposure time: 1 s.



Confocal imaging of frozen sections of Mouse brain tissue using GAD67/GAD1 Rabbit mAb (A28830, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

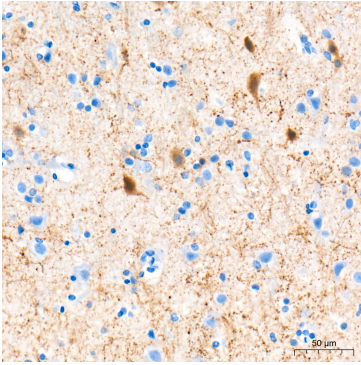


Confocal imaging of frozen sections of Rat brain tissue using GAD67/GAD1 Rabbit mAb (A28830, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

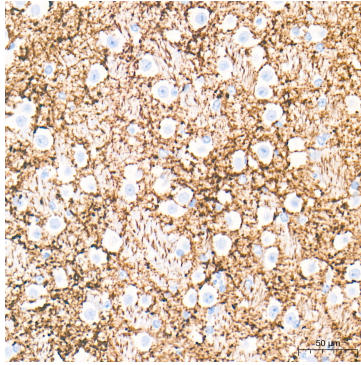


Confocal imaging of paraffin-embedded Human brain tissue using GAD67/GAD1 Rabbit mAb (A28830, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

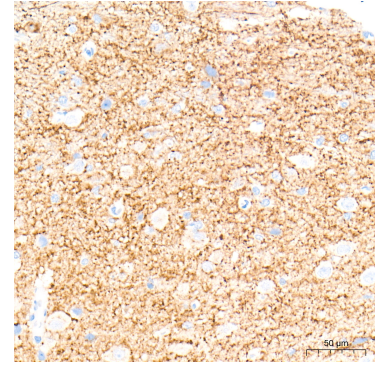
Validation Data



Immunohistochemistry analysis of paraffin-embedded Human brain tissue using GAD67/GAD1 Rabbit mAb (A28830) at a dilution of 1:700 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse brain tissue using GAD67/GAD1 Rabbit mAb (A28830) at a dilution of 1:700 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat brain tissue using GAD67/GAD1 Rabbit mAb (A28830) at a dilution of 1:700 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.