GAD67/GAD1 Rabbit mAb

Catalog NO.: A26748 Recombinant 1 Publications

Basic Information

Observed MW
67 kDa

Calculated MW
67 kDa

Category
Monoclonal Antibodies

Applications
WB, IP, IF-P, IHC-P, mIHC, ELISA

Cross-Reactivity
Mouse, Rat

Conjugation
Unconjugated

Clone number
ARC3297

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 1:1000 - 1:3000

IP
0.5 μg - 4 μg antibody for 500 μg - 700 μg extracts of whole cells

IF-P 1:50 - 1:200

IHC-P 1:200 - 1:400

mIHC 1:200 - 1:800

ELISA
Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
2571

Swiss Prot
Q99259

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

Synonyms
GAD; SCP; CPSQ1; DEE89

Contact

Product Information

order@abclonal.com
service@abclonal.com
www.abclonal.com

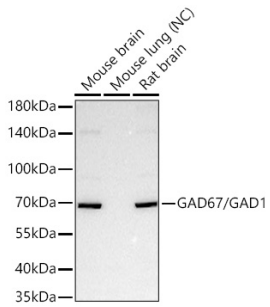
Source
Rabbit

Isotype
IgG

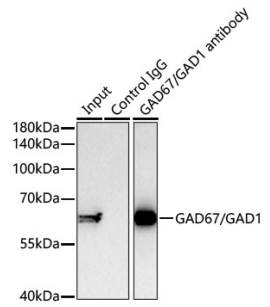
Purification
Affinity purification

Storage
Store at -20°C. Avoid freeze / thaw cycles.
Buffer: 10 mM sodium HEPES and 150 mM NaCl with proclin300 or sodium azide (as specified on the Certificate of Analysis),100 µg/ml BSA,50% Glycerol,pH 7.5

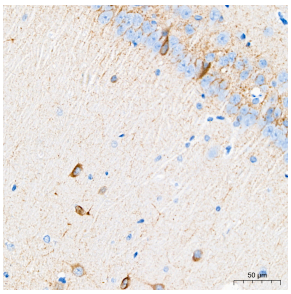
Validation Data



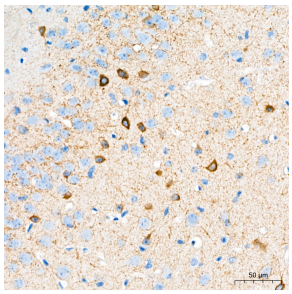
Western blot analysis of various lysates using GAD67/GAD1 Rabbit mAb (A26748) at 1:1000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Negative control (NC): Mouse lung
Exposure time: 30s.



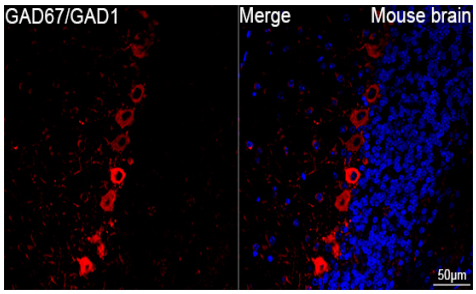
Immunoprecipitation of GAD67/GAD1 from 600 µg extracts of Mouse brain was performed using 0.5 µg of GAD67/GAD1 Rabbit mAb (A26748). Rabbit IgG isotype control (AC042) was used to precipitate the Control IgG sample. IP samples were eluted with 1X reducing Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using GAD67/GAD1 Rabbit mAb (A26748) at a dilution of 1:1000.



Immunohistochemistry analysis of paraffin-embedded Rat brain tissue using GAD67/GAD1 Rabbit mAb (A26748) at a dilution of 1:200 (40x lens).



Immunohistochemistry analysis of paraffin-embedded Mouse brain tissue using GAD67/GAD1 Rabbit mAb (A26748) at a dilution of 1:200 (40x lens).



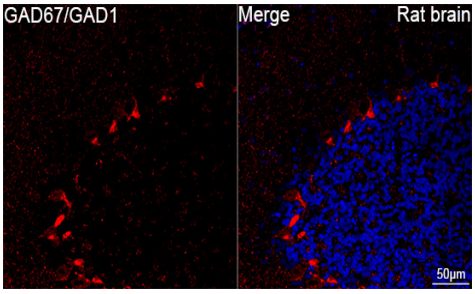
Confocal imaging of paraffin-embedded Mouse brain tissue using GAD67/GAD1 Rabbit mAb (A26748, dilution 1:50) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI

High pressure antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IHC staining.

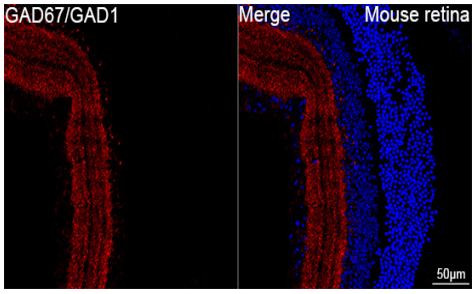
High pressure antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IHC staining.

was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IF staining. Objective: 40x.

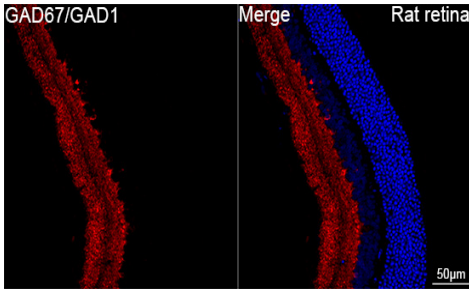
Validation Data



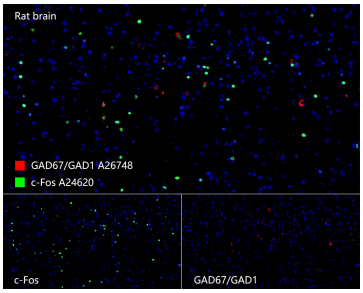
Confocal imaging of paraffin-embedded Rat brain tissue using GAD67/GAD1 Rabbit mAb (A26748, dilution 1:50) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IF staining. Objective: 40x.



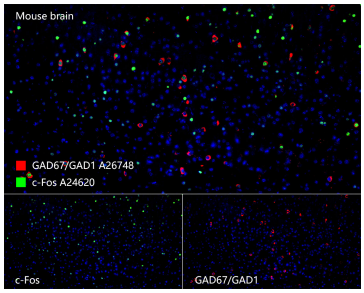
Confocal imaging of paraffin-embedded Mouse retina tissue using GAD67/GAD1 Rabbit mAb (A26748, dilution 1:50) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IF staining. Objective: 40x.



Confocal imaging of paraffin-embedded Rat retina tissue using GAD67/GAD1 Rabbit mAb (A26748, dilution 1:50) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IF staining. Objective: 40x.



The multiplex IHC analysis on paraffin-embedded Rat brain tissue using the following specific primary antibodies and tyramide signal amplification (TSA) reagents (RK05903) : c-Fos Rabbit mAb (A24620, 1:1000) with TSA-TYR-520 (Green), and GAD67/GAD1 Rabbit mAb (A26748, 1:500) with TSA-TYR-570 (Red). DAPI (Blue) was used for nuclear staining. Prior to multiplex IHC staining, high-pressure antigen retrieval was performed using 0.01M citrate buffer at pH 6.0. The analysis was completed using a 40x objective lens.



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