

Anti-GAD65 Antibody [PSH06-80] - BSA and Azide free

HA751102



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Cynomolgus monkey, Pig
Applications:	WB, IHC-P, IF-Tissue, IHC-Fr
Molecular Wt:	Predicted band size: 65 kDa
Clone number:	PSH06-80

Description: 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 autoantibody and an autoreactive T cell target in insulin-dependent diabetes. This gene may also play a role in the stiff man syndrome. Alternative splicing results in multiple transcript variants that encode the same protein.

Immunogen: Recombinant protein.

Positive control: Mouse brain tissue lysate, Mouse cerebellum tissue lysate, Rat brain tissue lysate, Rat cerebellum tissue lysate, human cerebellum tissue, mouse cerebellum tissue, rat cerebellum tissue, mouse brain tissue.

Subcellular location: Cytoplasm, cytosol, Cytoplasmic vesicle, Presynaptic cell membrane, Golgi apparatus membrane.

Database links: SwissProt: Q05329 Human | P48320 Mouse | Q05683 Rat

Recommended Dilutions:

WB	1:2,000-1:5,000
IHC-P	1:1,000
IF-Tissue	1:500
IHC-Fr	1:500-1:2,000

Storage Buffer: PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

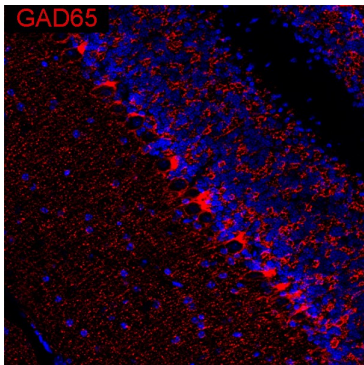


Fig1: Application: IHC-Fr

Species: Mouse

Site: Cerebellum

Sample: Frozen section

Antibody concentration: 1:500

Antigen retrieval: Not required

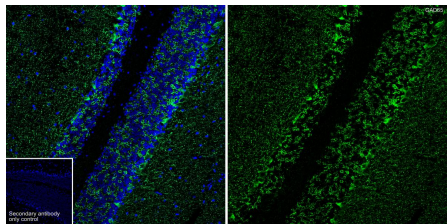


Fig2: Application: IHC-Fr

Species: Mouse

Site: Cerebellum

Sample: Frozen section

Antibody concentration: 1:500

Antigen retrieval: Not required

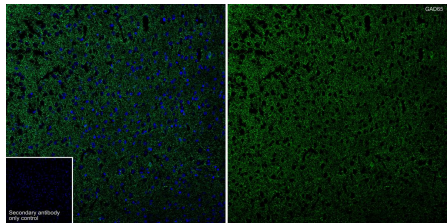


Fig3: Application: IHC-Fr

Species: Mouse

Site: Cerebral cortex

Sample: Frozen section

Antibody concentration: 1:500

Antigen retrieval: Not required

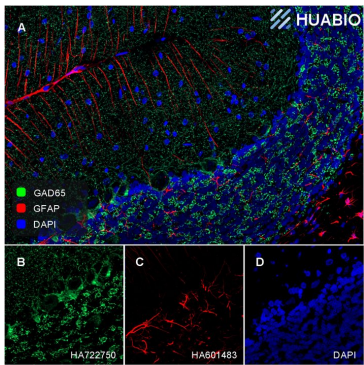


Fig4: Application: IHC-Fr

Species: Rat

Site: cerebellum

Sample: Frozen section

Antibody concentration: 1/500 (GAD65, HA751102, Rabbit, green); 1/1,000 (GFAP, HA610317, Rat, red)

Antigen retrieval: Not required

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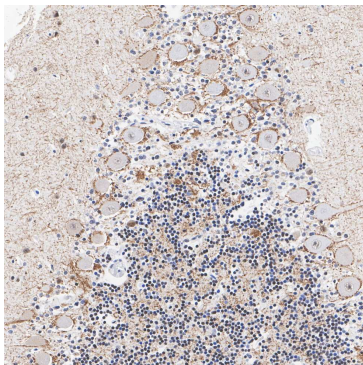


Fig5: Immunohistochemical analysis of paraffin-embedded human cerebellum tissue with Rabbit anti-GAD65 antibody (HA751102) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA751102) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

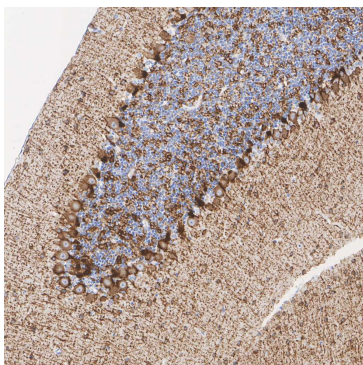


Fig6: Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue with Rabbit anti-GAD65 antibody (HA751102) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA751102) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



Fig7: Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue with Rabbit anti-GAD65 antibody (HA751102) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA751102) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

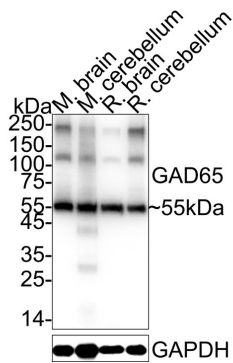


Fig8: Western blot analysis of GAD65 on different lysates with Rabbit anti-GAD65 antibody (HA751102) at 1/2,000 dilution.

Lane 1: Mouse brain tissue lysate (20 µg/Lane)
Lane 2: Mouse cerebellum tissue lysate (20 µg/Lane)
Lane 3: Rat brain tissue lysate (20 µg/Lane)
Lane 4: Rat cerebellum tissue lysate (20 µg/Lane)

Predicted band size: 65 kDa
Observed band size: 55 kDa

Exposure time: 4 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA751102) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

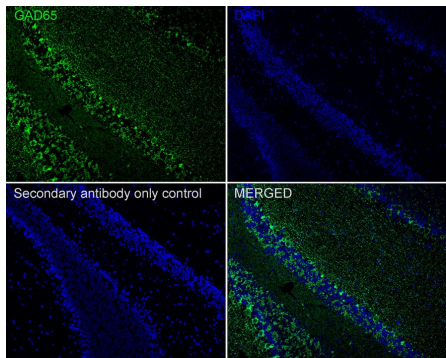


Fig9: Application: IF-tissue

Species: Mouse

Site: Cerebellum

Sample: Paraffin-embedded section

Antibody concentration: 1:500

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Budhram A et al. Clinical spectrum of high-titre GAD65 antibodies. J Neurol Neurosurg Psychiatry. 2021 Feb
2. Budhram A et al. Positive Predictive Value of Anti-GAD65 ELISA Cut-Offs for Neurological Autoimmunity. Can J Neurol Sci. 2023 Sep

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