abcam

Product datasheet

Anti-GAD65 antibody [EPR22952-70] - BSA and Azide free ab270037

Recombinant RabMAb

8 Images

Overview

Product name	Anti-GAD65 antibody [EPR22952-70] - BSA and Azide free
Description	Rabbit monoclonal [EPR22952-70] to GAD65 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** ICC, IHC-P, WB, IHC-Fr, IP, Flow Cyt
Species reactivity	**Reacts with:** Mouse, Rat
Immunogen	Synthetic peptide within Mouse GAD65 aa 1-100. The exact sequence is proprietary. Database link: P48320
Positive control	IHC-P: Rat pancreas and Mouse cerebrum tissues. IHC-Fr: Rat pancreas and Mouse cerebrum tissues. Flow Cyt: Beta-TC-6IP: Mouse brain lysate.
General notes	ab270037 is the carrier-free version of ab239372. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents. Reproducibility is key to advancing scientific discovery and accelerating scientists' next

breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22952-70
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab270037** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

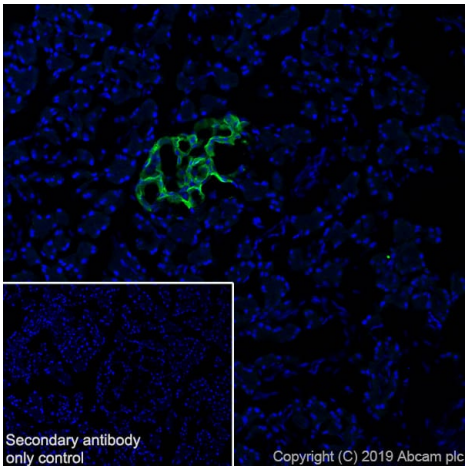
Application	Abreviews	Notes
ICC		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 65 kDa.
IHC-Fr		Use at an assay dependent concentration.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration.

Target

Function	Catalyzes the production of GABA.
Sequence similarities	Belongs to the group II decarboxylase family.
Post-translational modifications	Phosphorylated; which does not affect kinetic parameters or subcellular location. Palmitoylated; which is required for presynaptic clustering.
Cellular localization	Cytoplasm > cytosol. Cytoplasmic vesicle. Cell junction > synapse > presynaptic cell membrane. Golgi apparatus membrane. Associated to cytoplasmic vesicles. In neurons, cytosolic leaflet of Golgi membranes and presynaptic clusters.

Images

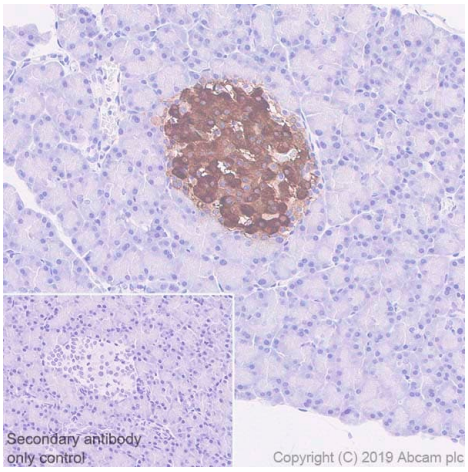


Immunohistochemistry (Frozen sections) - Anti-GAD65 antibody [EPR22952-70] - BSA and Azide free (ab270037)

Immunohistochemical analysis of 4% PFA fixed 0.2% Triton X-100 permeabilized frozen Rat pancreas tissue labeling GAD65 with ab239372 at 1/100 dilution (Green) followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution. The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody was ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239372).

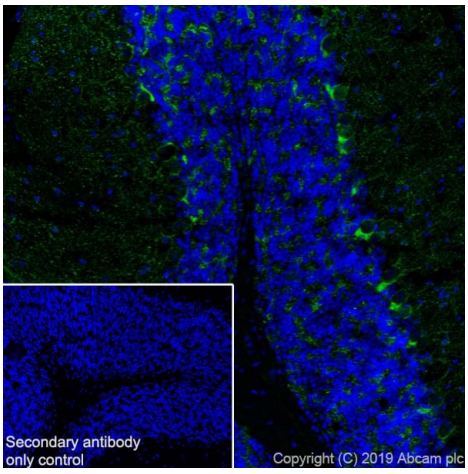


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAD65 antibody [EPR22952-70] - BSA and Azide free (ab270037)

Immunohistochemical analysis of paraffin-embedded Rat pancreas tissue labeling GAD65 with ab239372 at 1/2000 (0.323 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining on islet of rat pancreas. The section was incubated with ab239372 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239372).

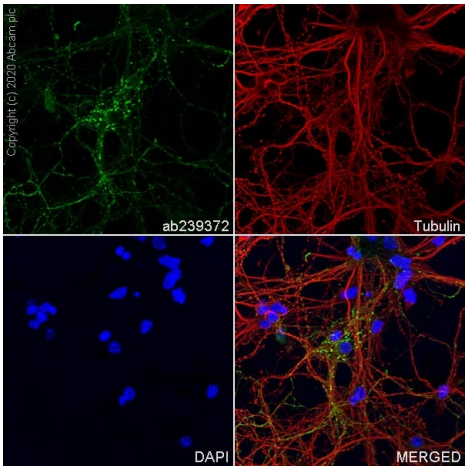


Immunohistochemistry (Frozen sections) - Anti-GAD65 antibody [EPR22952-70] - BSA and Azide free (ab270037)

Immunohistochemical analysis of 4% PFA fixed 0.2% Triton X-100 permeabilized frozen Mouse cerebellum tissue labeling GAD65 with ab239372 at 1/100 dilution (Green) followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution. The nuclear counterstain was DAPI (Blue). Positive staining on mouse cerebellum is observed.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody was ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239372).

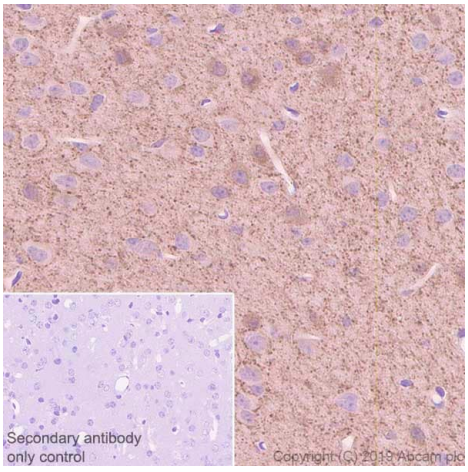


Immunocytochemistry - Anti-GAD65 antibody [EPR22952-70] - BSA and Azide free (ab270037)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neuron cells labelling GAD65 with ab239372 at 1/100 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in mouse primary neurons.is observed. ab195889 Anti-alpha Tubulin antibody (Alexa Fluor® 594) was used to counterstain tubulin at 1/1000 dilution (Red). The Nuclear counterstain was DAPI (Blue). Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239372).

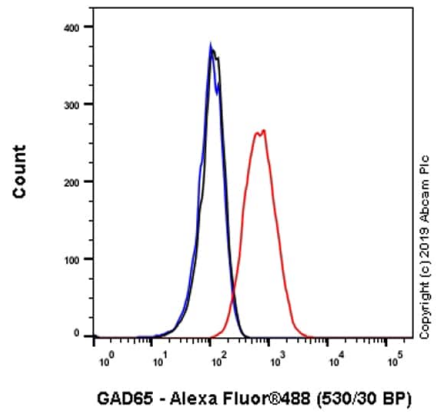


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAD65 antibody [EPR22952-70] - BSA and Azide free (ab270037)

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labeling GAD65 with ab239372 at 1/2000 (0.323 ug/ml) dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on mouse cerebrum is observed. The section was incubated with ab239372 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

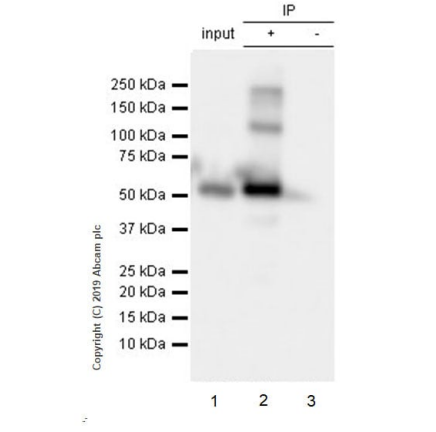
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239372).



Flow Cytometry - Anti-GAD65 antibody [EPR22952-70] - BSA and Azide free (ab270037)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Beta-TC-6 (Mouse pancreas insulinoma beta cell) cells labelling GAD65 with ab239372 at 1/60 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239372).



Immunoprecipitation - Anti-GAD65 antibody [EPR22952-70] - BSA and Azide free (ab270037)

GAD65 was immunoprecipitated from 0.35 mg Mouse brain lysate with ab239372 at 1/30 dilution. Western blot was performed on the immunoprecipitate using ab239372 at 1/1000 dilution (0.45 µg/ml). VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: Mouse brain lysate 10 µg

Lane 2: ab239372 IP in Mouse brain lysate

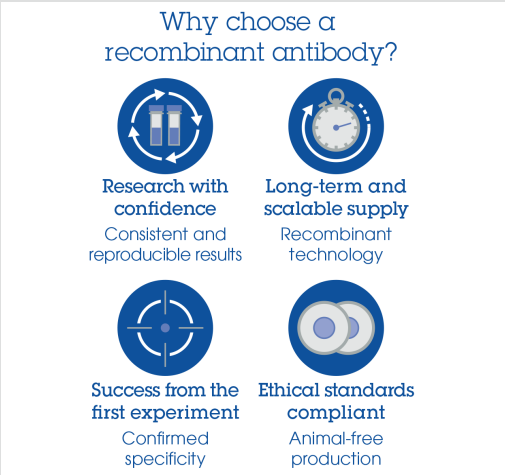
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab239372 in Mouse brain lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 seconds

Bands above 100kDa are multimers of GAD65 (PMID: 10601283).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab239372).



Anti-GAD65 antibody [EPR22952-70] - BSA and Azide free (ab270037)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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