abcam

ab239372

Anti-GAD65 antibody [EPR22952-70]

Anti-GAD65 antibody [EPR22952-70] (ab239372) is a rabbit monoclonal antibody detecting GAD65 in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, IHC-Fr, ICC/IF**. Suitable for **Mouse, Rat**.

- Biophysical QC for unrivalled batch-batch consistency

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR22952-70
Purification technique	Affinity purification Protein A
Concentration	0.624 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Mouse
Dilution info	1/50

Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/5000
Notes	-

Species	Rat
Dilution info	1/5000
Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/2000
Notes	-

Species	Rat
Dilution info	1/2000
Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Mouse
Dilution info	1/100
Notes	-

Species	Rat
Dilution info	1/100
Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/60
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

Target data

See full target information Gad2

Function	Catalyzes the production of GABA.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?
Anti-GAD65 antibody [EPR22952-70] (ab239372) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunoprecipitation (IP), Immunohistochemistry (IHC-P), Immunohistochemistry (IHC-Fr), Immunocytochemistry/immunofluorescence (ICC/IF) in Mouse, Rat samples.

What is the molecular weight of GAD65?
Anti-GAD65 [EPR22952-70] (ab239372) specifically detects a band for GAD65 (UniProt: P48320) at a molecular weight of 65kDa.

Other related products
We have a range of other formats of antibody clone [EPR22952-70] also available for your convenience: ab239372, Carrier free - ab270037, Alexa Fluor® 555 - ab300548, Alexa Fluor® 647 - ab300737, Alexa Fluor® 594 - ab302656, Alexa Fluor® 488 - ab307129, Alexa Fluor® 568 - ab307856

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Trial sizes available!
Test your antibody or perform pre-screening before committing to a larger quantity. Sold in 20µl. Discover our selection of trial-size antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

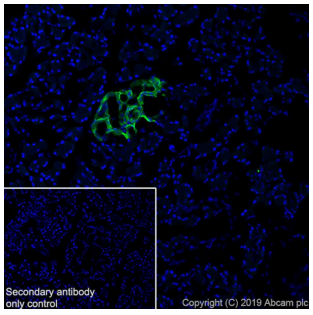
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

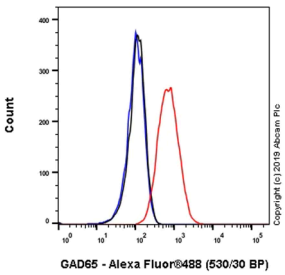
8 product images



Immunohistochemistry (Frozen sections) - Anti-GAD65 antibody [EPR22952-70] (ab239372)

GAD65 Immunohistochemistry (Frozen sections) staining using rabbit Anti-GAD65 antibody

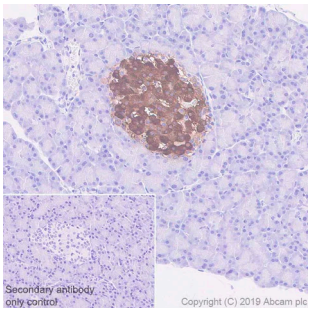
Immunohistochemical analysis of 4% PFA fixed 0.2% Triton X-100 permeabilized frozen Rat pancreas tissue labeling GAD65 with ab239372 at 1/100 dilution (Green) followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution. The nuclear counterstain was DAPI (Blue).
Secondary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



Flow Cytometry (Intracellular) - Anti-GAD65 antibody [EPR22952-70] (ab239372)

GAD65 Flow Cytometry (Intracellular) staining using rabbit Anti-GAD65 antibody

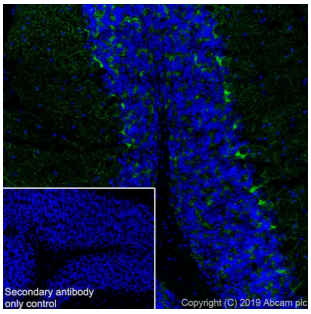
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Beta-TC-6 (Mouse pancreas insulinoma beta cell) cells labelling GAD65 with ab239372 at 1/60 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAD65 antibody [EPR22952-70] (ab239372)

GAD65 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GAD65 antibody

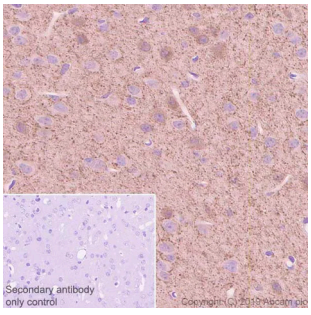
Immunohistochemical analysis of paraffin-embedded Rat pancreas tissue labeling GAD65 with ab239372 at 1/2000 (0.323 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining on islet of rat pancreas. The section was incubated with ab239372 for 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).



Immunohistochemistry (Frozen sections) - Anti-GAD65 antibody [EPR22952-70] (ab239372)

GAD65 Immunohistochemistry (Frozen sections) staining using rabbit Anti-GAD65 antibody

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.

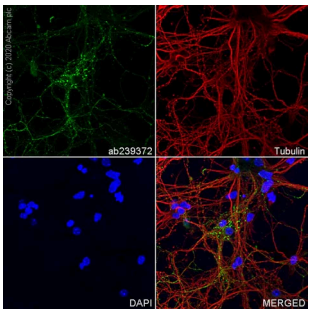


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAD65 antibody [EPR22952-70] (ab239372)

GAD65 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GAD65 antibody

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.

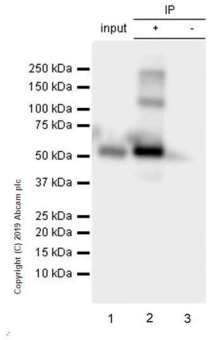
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Immunocytochemistry/ Immunofluorescence - Anti-GAD65 antibody [EPR22952-70] (ab239372)

GAD65 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-GAD65 antibody

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.



Immunoprecipitation - Anti-GAD65 antibody [EPR22952-70] (ab239372)

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.

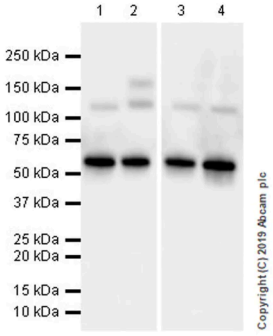
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 seconds

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

All lanes:
Immunoprecipitation - Anti-GAD65 antibody [EPR22952-70] (ab239372)

Predicted band size: 65 kDa



Western blot - Anti-GAD65 antibody [EPR22952-70] (ab239372)

Blocking/diluting buffer and concentration: 5% NFDM/TBST
Exposure time: 8 seconds.

Bands above 100kDa are multimers of GAD65.

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 10601283, 21734072).

All lanes:
Western blot - Anti-GAD65 antibody [EPR22952-70] (ab239372) at 1/5000 dilution

Lane 1:

Mouse brain tissue lysate at 20 µg

Lane 2:
Mouse cerebellum tissue lysate at 20 µg

Lane 3:
Rat brain tissue lysate at 20 µg

Lane 4:
Rat cerebellum tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 65 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.