abcam

ab26116

Anti-GAD67/GAD1 antibody [K-87]

Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116) is a mouse monoclonal antibody detecting GAD67/GAD1 in **Western Blot, Flow Cytometry, IHC-P, ICC/IF**. Suitable for **Human, Mouse, Rat**.

- Over 100 publications
- Trusted since 2005

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.01% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human GAD1 aa 50-150. The exact immunogen used to generate this antibody is proprietary information. Database link Q99259
Clone number	K-87
Purification technique	Affinity purification Protein A
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/100000
Notes	-

Species	Mouse
Dilution info	1/5000 - 1/100000
Notes	-

Expected

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

IHC-P

Tested

Species	Mouse
Dilution info	1/1000 - 1/10000
Notes	An antigen retrieval step is necessary (e.g. incubating the sections at 90 degrees C in a 50mM citrate buffer). Cell body labeling is optimized when Triton is omitted from the tissue processing. Axon terminal labeling is substantially increased (and cell body labeling decreased) when Triton is included (see Soghomonian et al, 1998).

Expected

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

Flow Cyt

Tested

Species	Rat

Dilution info	1 µg for 10^6 Cells
Notes	(methanol fixed cells) ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Expected

Species	Human, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Rat
Dilution info	10 µg/mL
Notes	-

Expected

Species	Human, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information GAD1

Function	Catalyzes the synthesis of the inhibitory neurotransmitter gamma-aminobutyric acid (GABA) with pyridoxal 5'-phosphate as cofactor. Isoform 3. Enzymatically inactive as glutamate decarboxylase.

Storage

Shipped at conditions	Blue Ice
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

ab26116 mouse monoclonal [K-87] to GAD67 specically recognizes GAD67 and has no cross reactivity with GAD65; this has been shown on western blots of mouse brain or purified recombinant GAD67 and GAD65. In immunohistochemical analysis of brain sections, the K-87 monoclonal recognizes GAD67 in nerve cell bodies and has an enhanced ability to detect GAD67 in dendrites and axon buttons compared to the original anti-GAD67 K-2 polyclonal antibody (see Kaufman et al, 1991).

Product Specifications
Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116) is a mouse monoclonal antibody and is validated for use in Flow Cyt, ICC/IF, IHC-P, WB in human, mouse, rat samples.
Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116) specifically detects GAD67/GAD1 (UniProt ID: Q99259; Molecular weight: 67kDa) and is sold in 100 µg selling sizes.

Quality and Validation
Abcam's high quality validation processes ensure Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116) has high sensitivity and specificity.
Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116) has been cited over 104 times in peer reviewed journals and is trusted by the scientific community.
Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116) has 19 independent reviews from customers.

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

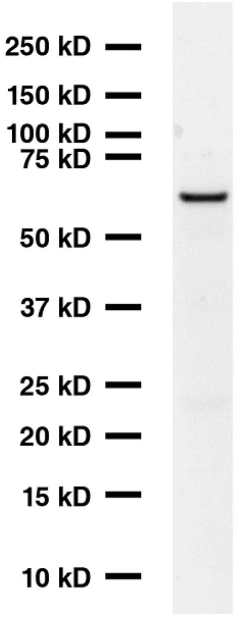
We do not recommend this combination. It is not covered by our product promise.

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.

5 product images



Western blot - Anti-GAD67/GAD1 antibody [K-87] (ab26116)

GAD67/GAD1 Western blot staining of mouse cerebellum using mouse Anti-GAD67/GAD1 antibody

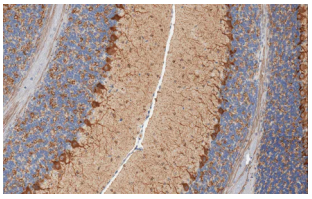
All lanes:
Western blot - Anti-GAD67/GAD1 antibody [K-87] (ab26116) at 1/2000 dilution

All lanes:
mouse cerebellum at 0.75 µg

Secondary

All lanes:
HRP horse anti-mouse IgG at 1/5000 dilution

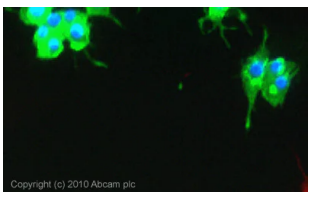
Predicted band size: 66 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAD67/GAD1 antibody [K-87] (ab26116)

GAD67/GAD1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-GAD67/GAD1 antibody

ab26116, at a 1/2000 dilution, staining of fixed mouse cerebellum sections that underwent an antigen retrieval step.

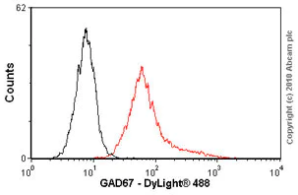


Immunocytochemistry/ Immunofluorescence - Anti-GAD67/GAD1 antibody [K-87] (ab26116)

GAD67/GAD1 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-GAD67/GAD1 antibody

ICC/IF image of ab26116 stained PC12 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab26116, 10µg/ml) overnight at +4°C. The secondary antibody

(green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

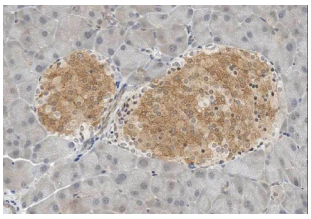


Flow Cytometry - Anti-GAD67/GAD1 antibody [K-87] (ab26116)

GAD67/GAD1 Flow Cytometry staining using mouse Anti-GAD67/GAD1 antibody

Overlay histogram showing PC12 cells stained with ab26116 (red line). The cells were fixed with methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab26116, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a slightly decreased signal in PC12 cells fixed with 4% paraformaldehyde (10 min) used under the same conditions.

Please note that Abcam does not have data for use of this antibody on non-fixed cells. We welcome any customer feedback.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GAD67/GAD1 antibody [K-87] (ab26116)

GAD67/GAD1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-GAD67/GAD1 antibody

Immunohistochemical staining of mouse pancreatic islet beta cells after antigen retrieval with ab26116 at a dilution of 1/1000.

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