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Product datasheet

Anti-GAD67/GAD1 antibody [K-87] ab26116

21 Abreviews 90 References 画像数 5

製品の概要

製品名	Anti-GAD67/GAD1 antibody [K-87]
製品の詳細	Mouse monoclonal [K-87] to GAD67/GAD1
由来種	Mouse
アプリケーション	**適用あり:** ICC/IF, Flow Cyt, IHC-P, WB
種交差性	**交差種:** Mouse, Rat
免疫原	Synthetic peptide corresponding to Human GAD1/GAD67 aa 50-150. Database link: **Q99259-1** Run BLAST with Run BLAST with
ポジティブ・コントロール	Recombinant Human GAD67 protein (**ab114255**) can be used as a positive control in WB. In WB, this antibody gave a positive signal in Mouse and Rat Brain Tissue Lysates. GAD67 has been thought to be primarily located in the nerve cell body, but using this new K-87 mAb, GAD67 can now also be detected in dendrites and axons.
特記事項	ab26116 mouse monoclonal [K-87] to GAD1/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). The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.40

	Preservative: 0.01% Sodium azide Constituent: 0.0268% PBS
精製度	Protein A purified
一次抗体 備考	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).
ポリ/モノ	モノクローナル
クローン名	K-87
アイソタイプ	IgG1
軽鎖の種類	kappa

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab26116の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

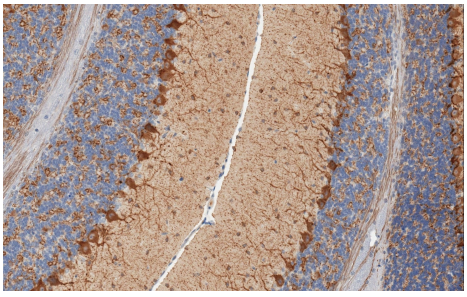
アプリケーション	Abreviews	特記事項
ICC/IF	★★★★☆ (1)	Use a concentration of 10 µg/ml.
Flow Cyt		Use 1µg for 10^6 cells. (methanol fixed cells) **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P	★★★★☆ (11)	1/1000 - 1/10000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. 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).
WB	★★★★★ (6)	1/5000 - 1/100000. Detects a band of approximately 67 kDa (predicted molecular weight: 67 kDa).

ターゲット情報

機能	Catalyzes the production of GABA.
組織特異性	Isoform 3 is expressed in pancreatic islets, testis, adrenal cortex, and perhaps other endocrine tissues, but not in brain.
関連疾患	Defects in GAD1 are the cause of cerebral palsy spastic quadriplegic type 1 (CPSQ1) [MIM:603513]. A non-progressive disorder of movement and/or posture resulting from defects in the developing central nervous system. Affected individuals manifest symmetrical, non-progressive spasticity and no adverse perinatal history or obvious underlying alternative

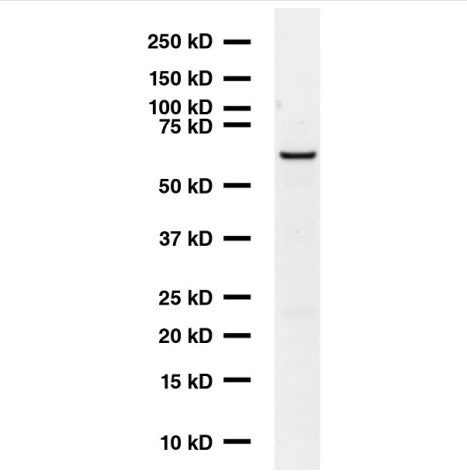
	diagnosis. Developmental delay, mental retardation and sometimes epilepsy can be part of the clinical picture.
配列類似性	Belongs to the group II decarboxylase family.

画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116)

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



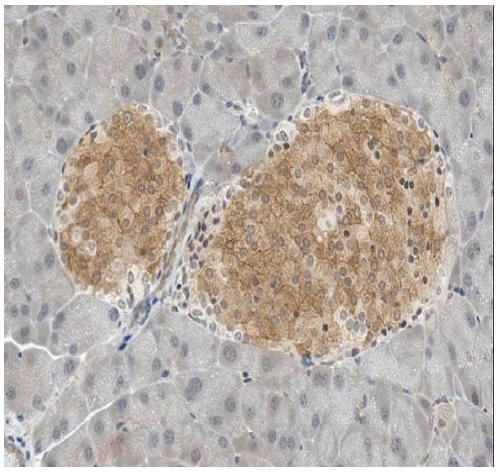
Western blot - Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116)

Anti-GAD67/GAD1 antibody [K-87] (ab26116) at 1/2000 dilution + mouse cerebellum at 0.75 µg

Secondary

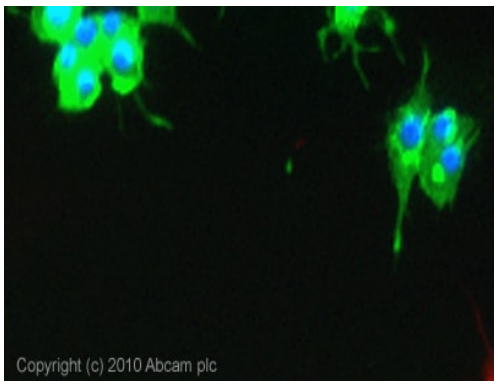
HRP horse anti-mouse IgG at 1/5000 dilution

Predicted band size: 67 kDa



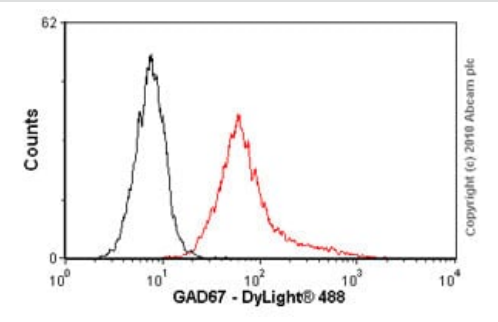
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116)

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



Immunocytochemistry/ Immunofluorescence - Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116)

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 - Mouse monoclonal [K-87] to GAD67/GAD1 (ab26116)

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.

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