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Product datasheet

Anti-ACADM/MCAD antibody [3B7BH7] ab110296

1 Abreviews 12 References 画像数 5

製品の概要

製品名	Anti-ACADM/MCAD antibody [3B7BH7]
製品の詳細	Mouse monoclonal [3B7BH7] to ACADM/MCAD
由来種	Mouse
アプリケーション	**適用あり:** WB, Flow Cyt, IHC-P, ICC/IF
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	HeLa cells, HL-60 cells, Human cerebellum, HepG2 cells, HeLa cells, H9C2 (rat cells), and MEF (mouse cells) lysates.
特記事項	MCAD (medium-chain acyl-CoA dehydrogenase) is an oxidoreductase enzyme of the mitochondrial fatty acid beta-oxidation pathway that is specific for acyl chain lengths of 4 to 16. It also utilizes the electron transfer flavoprotein (ETF) as electron acceptor that transfers the electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase). This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. 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 Product was previously marketed under the MitoSciences sub-brand.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.5 Preservative: 0.02% Sodium azide

	Constituent: 99.98% HEPES buffered saline
精製度	Ammonium Sulphate Precipitation
特記事項（精製）	Produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
一次抗体 備考	MCAD (medium-chain acyl-CoA dehydrogenase) is an oxidoreductase enzyme of the mitochondrial fatty acid beta-oxidation pathway that is specific for acyl chain lengths of 4 to 16. It also utilizes the electron transfer flavoprotein (ETF) as electron acceptor that transfers the electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase).
ポリ/モノ	モノクローナル
クローン名	3B7BH7
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ab110296の使用に適用されます

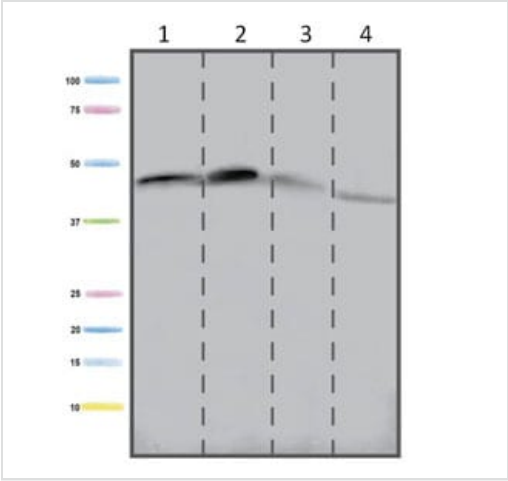
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★☆ (1)	Use a concentration of 0.125 µg/ml. Predicted molecular weight: 47 kDa.
Flow Cyt		Use a concentration of 1 µg/ml. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P		1/1000. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 1 µg/ml.

ターゲット情報

機能	This enzyme is specific for acyl chain lengths of 4 to 16.
パスウェイ	Lipid metabolism; mitochondrial fatty acid beta-oxidation.
関連疾患	Defects in ACADM are the cause of acyl-CoA dehydrogenase medium-chain deficiency (ACADMD) [MIM:201450]. It is an autosomal recessive disease which causes fasting hypoglycemia, hepatic dysfunction, and encephalopathy, often resulting in death in infancy.
配列類似性	Belongs to the acyl-CoA dehydrogenase family.
細胞内局在	Mitochondrion matrix.

画像



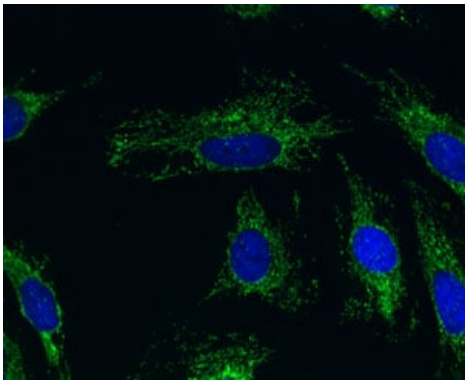
Western blot - Anti-ACADM/MCAD antibody [3B7BH7] (ab110296)

All lanes : Anti-ACADM/MCAD antibody [3B7BH7] (ab110296) at 0.125 µg/ml

Lane 1 : HepG2 cell lysates
Lane 2 : HeLa cell lysates
Lane 3 : H9C2 (rat cells) lysates
Lane 4 : MEF (mouse cells) lysates

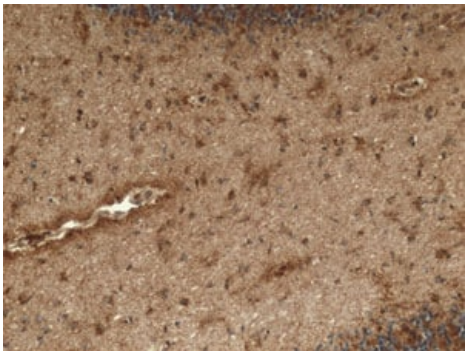
Lysates/proteins at 15 µg per lane.

Predicted band size: 47 kDa



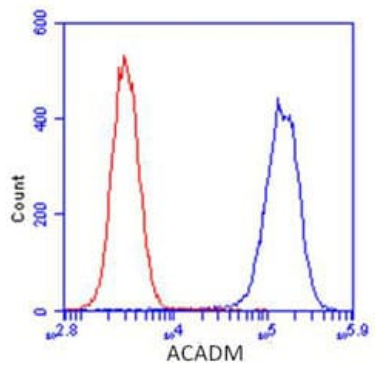
Immunocytochemistry/ Immunofluorescence - Anti-ACADM/MCAD antibody [3B7BH7] (ab110296)

Immunocytochemistry image of ab110296 stained Human HeLa cells. The cells were paraformaldehyde fixed (4%, 20 minutes) and Triton X-100 permeabilized (0.1%, 15 minutes). The cells were incubated with ab110296 (1 µg/ml) for 2 hours at room temperature or over night at 4°C. The secondary antibody was (green) Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1 hour. 10% Goat serum was used as the blocking agent for all blocking steps. DAPI was used to stain the cell nuclei (blue). Target protein locates mainly in mitochondria.



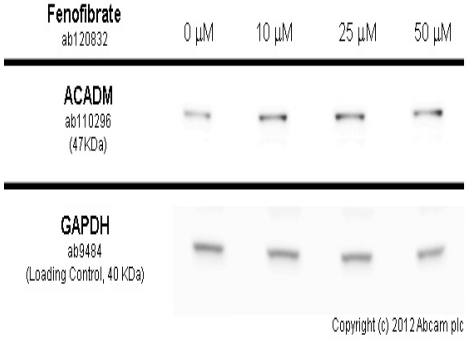
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACADM/MCAD antibody [3B7BH7] (ab110296)

ACADM/MCAD immunohistochemistry in Human cerebellum visualized with ab110296 at 1/1000. MCAD immunoactivity is most intense in neuronal cell bodies, most notably in the large Purkinje cells. Note the distinctive subcellular localization of MCAD immunoreactivity in the Purkinje cell bodies.



Flow Cytometry - Anti-ACADM/MCAD antibody [3B7BH7] (ab110296)

HL-60 cells were stained with 1 µg/mL ab110296 (blue) or an equal amount of an isotype control antibody (red) and analyzed by flow cytometry.



Western blot - Anti-ACADM/MCAD antibody [3B7BH7] (ab110296)

HL-60 cells were incubated at 37&degC for 24h with vehicle control (0 &microM) and different concentrations of fenofibrate (**ab120832**). Increased expression of ACADM/MCAD in HL-60 cells correlates with an increase in fenofibrate concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 10&microg of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with ab110296 at 1 &microg/ml and **ab9484** at 1 &microg/ml overnight at 4°C. Antibody binding was detected using an anti-mouse antibody conjugated to HRP (**ab97040**) at 1/10000 dilution and visualised using ECL development solution.

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