

Anti-ACADM/MCAD antibody [3B7BH7] ab110296

★★★★★ **1 Abreviews** **12 References** **5 图像**

概述

| | |
|-------|--|
| 产品名称 | Anti-ACADM/MCAD抗体[3B7BH7] |
| 描述 | 小鼠单克隆抗体[3B7BH7] to ACADM/MCAD |
| 宿主 | Mouse |
| 经测试应用 | 适用于: WB, Flow Cyt, IHC-P, ICC/IF |
| 种属反应性 | 与反应: Mouse, Rat, Human |
| 免疫原 | Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers. |
| 阳性对照 | HeLa cells, HL-60 cells, Human cerebellum, HepG2 cells, HeLa cells, H9C2 (rat cells), and MEF (mouse cells) lysates. |
| 常规说明 | <p>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).</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>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.</p> <p>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</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p> |

性能

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| 形式 | Liquid |
| 存放说明 | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| 存储溶液 | <p>pH: 7.5</p> <p>Preservative: 0.02% Sodium azide</p> |

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| | Constituent: 99.98% HEPES buffered saline |
| 纯度 | Ammonium Sulphate Precipitation |
| 纯化说明 | Produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation. |
| Primary antibody说明 | 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). |
| 克隆 | 单克隆 |
| 克隆编号 | 3B7BH7 |
| 同种型 | IgG1 |
| 轻链类型 | kappa |

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab110296于以下的经测试应用

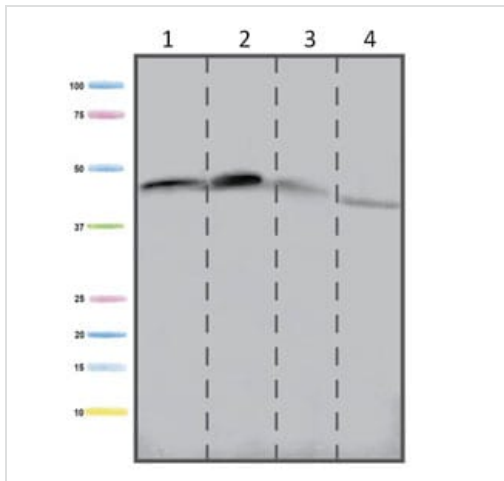
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

| 应用 | Ab评论 | 说明 |
|----------|-----------|---|
| 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. |

靶标

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| 功能 | This enzyme is specific for acyl chain lengths of 4 to 16. |
| 通路 | Lipid metabolism; mitochondrial fatty acid beta-oxidation. |
| 疾病相关 | Defects in ACADM are the cause of acyl-CoA dehydrogenase medium-chain deficiency (ACADM) [MIM:201450]. It is an autosomal recessive disease which causes fasting hypoglycemia, hepatic dysfunction, and encephalopathy, often resulting in death in infancy. |
| 序列相似性 | Belongs to the acyl-CoA dehydrogenase family. |
| 细胞定位 | Mitochondrion matrix. |

图片



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

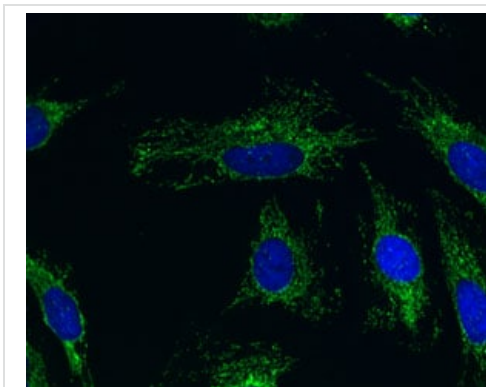
Lane 2 : HeLa cell lysates

Lane 3 : H9C2 (rat cells) lysates

Lane 4 : MEF (mouse cells) lysates

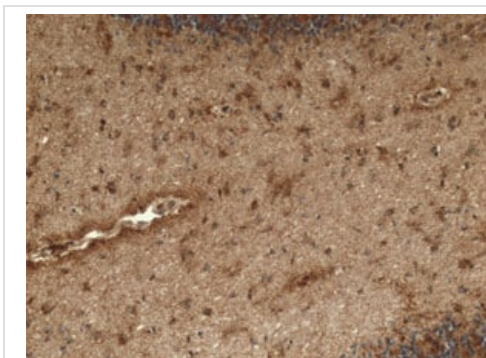
Lysates/proteins at 15 µg per lane.

Predicted band size: 47 kDa



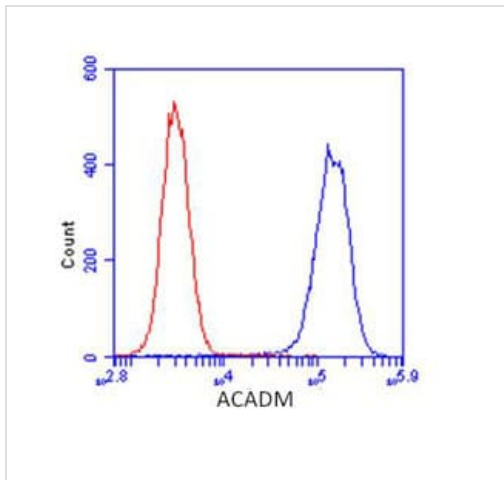
Immunocytochemistry/ Immunofluorescence - Anti-ACADM/MCAD antibody [3B7BH7] (ab110296)

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.



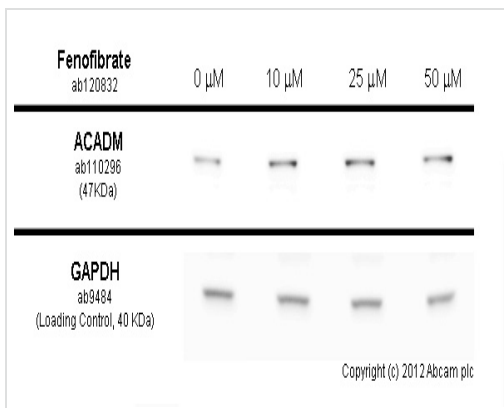
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACADM/MCAD antibody [3B7BH7] (ab110296)

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°C for 24h with vehicle control (0 µM) 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 µg 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 µg/mL and **ab9484** at 1 µg/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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