

## Product datasheet

### Anti-ACADM/MCAD antibody [EPR3708] ab92461

Recombinant RabMAb

★★★★★ [7 Abreviews](#) [23 References](#) [13 Images](#)

#### Overview

<b>Product name</b>	Anti-ACADM/MCAD antibody [EPR3708]
<b>Description</b>	Rabbit monoclonal [EPR3708] to ACADM/MCAD
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, IHC-P, ICC/IF, Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human ACADM/MCAD aa 200-300. The exact sequence is proprietary.
<b>Positive control</b>	WB: Human heart or fetal liver tissue lysates; HeLa, HepG2, or K562 cell lysates; IHC-P: Human liver, mouse liver, and rat stomach tissues; ICC/IF: HeLa cells; IP: Mouse heart lysate; Flow Cyt (intra): HeLa cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3708

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab92461 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/10000 - 1/50000. Predicted molecular weight: 47 kDa.
IP		1/10 - 1/100.
IHC-P	★★★★★ (1)	1/600. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> . <b>For unpurified use at 1/100 - 1/250.</b>
ICC/IF	★★★★★ (2)	1/50 - 1/250.
Flow Cyt (Intra)		1/60.

## Target

### Function

This enzyme is specific for acyl chain lengths of 4 to 16.

### Pathway

Lipid metabolism; mitochondrial fatty acid beta-oxidation.

### Involvement in disease

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.

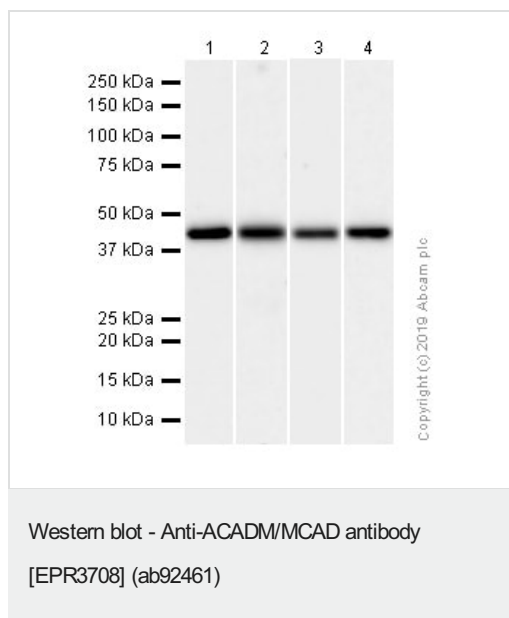
### Sequence similarities

Belongs to the acyl-CoA dehydrogenase family.

### Cellular localization

Mitochondrion matrix.

## Images



**All lanes :** Anti-ACADM/MCAD antibody [EPR3708] (ab92461) at 1/10000 dilution (Purified)

**Lane 1 :** K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysates

**Lane 2 :** Human heart lysates

**Lane 3 :** Mouse heart lysates

**Lane 4 :** Rat heart lysates

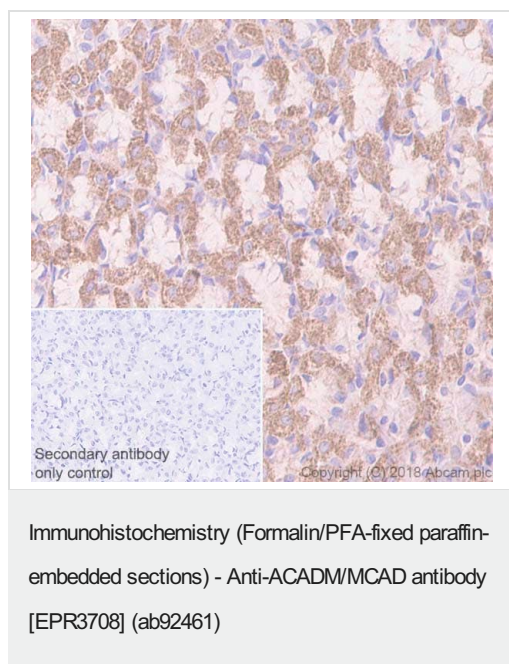
Lysates/proteins at 20 µg per lane.

## Secondary

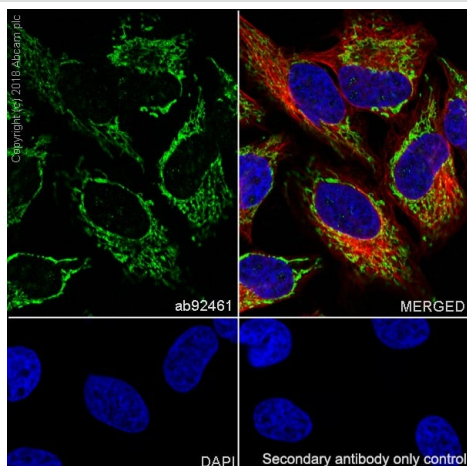
**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 47 kDa

**Observed band size:** 43 kDa

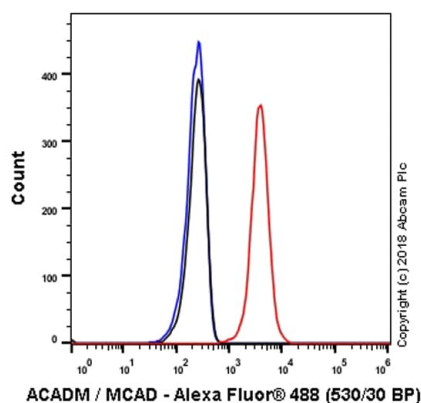


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat stomach tissue sections labeling ACADM/MCAD with purified ab92461 at 1/600 dilution (1.02 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



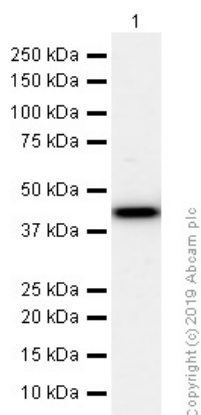
Immunocytochemistry/ Immunofluorescence - Anti-ACADM/MCAD antibody [EPR3708] (ab92461)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling ACADM/MCAD with purified ab92461 at 1:50 dilution (10 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-ACADM/MCAD antibody [EPR3708] (ab92461)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling ACADM/MCAD with purified ab92461 at 1/60 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-ACADM/MCAD antibody  
[EPR3708] (ab92461)

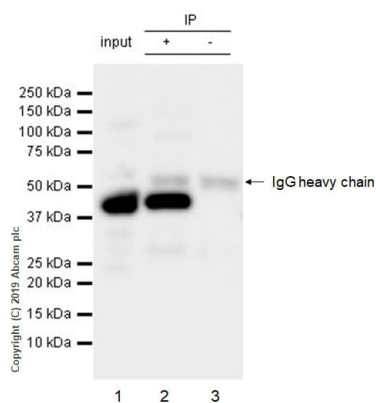
Anti-ACADM/MCAD antibody [EPR3708] (ab92461) at 1/10000 dilution (Purified) + HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates at 15 µg

### Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 47 kDa

**Observed band size:** 43 kDa



Immunoprecipitation - Anti-ACADM/MCAD antibody  
[EPR3708] (ab92461)

ab92461 (purified) at 1/30 dilution (2 µg) immunoprecipitating  
ACADM/MCAD in Mouse heart lysate.

Lane 1 (input): Mouse heart lysate 10 µg

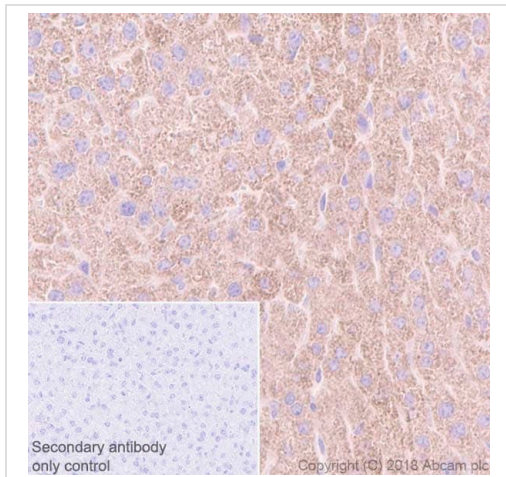
Lane 2 (+): ab92461 & Mouse heart lysate

Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of ab92461  
in Mouse heart lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP)

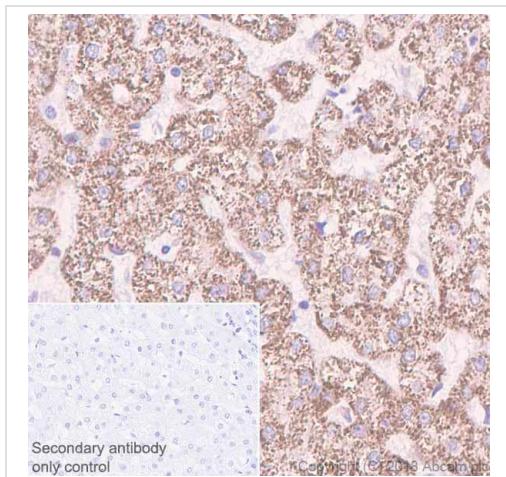
([ab131366](#)) was used at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



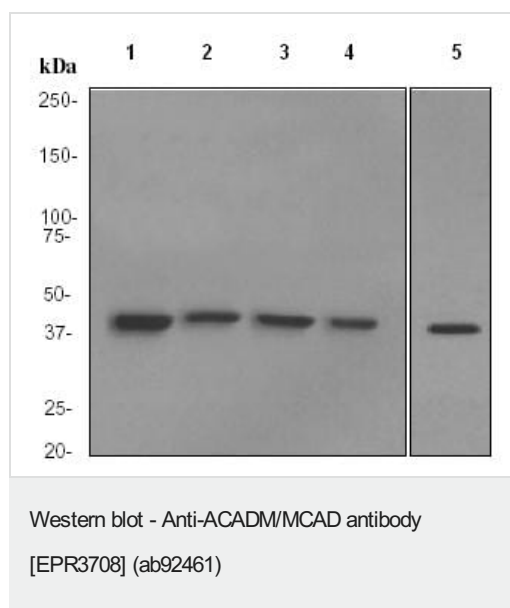
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACADM/MCAD antibody [EPR3708] (ab92461)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue sections labeling ACADM/MCAD with purified ab92461 at 1/600 dilution (1.02 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACADM/MCAD antibody [EPR3708] (ab92461)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue sections labeling ACADM/MCAD with purified ab92461 at 1/600 dilution (1.02 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



**All lanes :** Anti-ACADM/MCAD antibody [EPR3708] (ab92461) at 1/10000 dilution (unpurified)

**Lane 1 :** Human heart lysate

**Lane 2 :** fetal liver lysate

**Lane 3 :** HeLa cell lysate

**Lane 4 :** HepG2 cell lysate

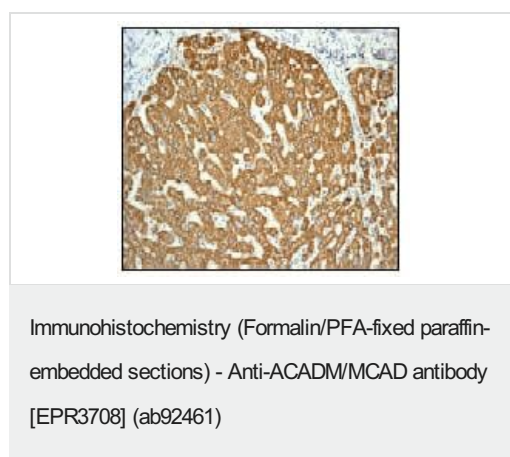
**Lane 5 :** K562 cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** HRP conjugated Goat anti-Rabbit Ig at 1/2000 dilution

**Predicted band size:** 47 kDa



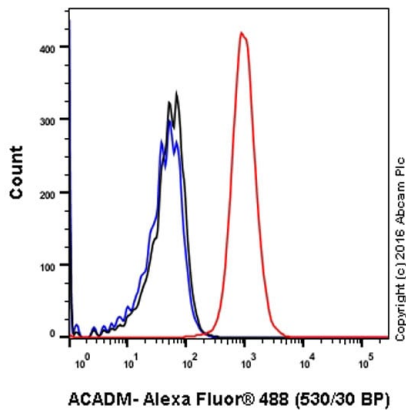
ab92461 (unpurified), at 1/100 dilution, staining ACADM/MCAD in formalin-fixed, paraffin-embedded Human liver tissue by immunohistochemistry.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunofluorescent staining of ACADM/MCAD in HeLa cells using ab92461 (unpurified) at 1/100 dilution.

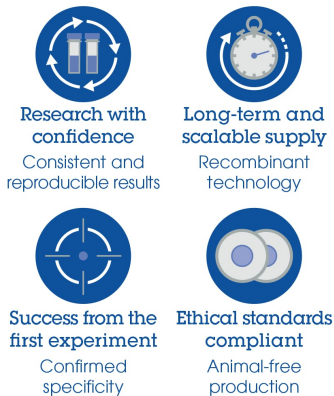




Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling ACADM/MCAD with unpurified ab92461 at 1/50 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.

Flow Cytometry (Intracellular) - Anti-ACADM/MCAD antibody [EPR3708] (ab92461)

#### Why choose a recombinant antibody?



Anti-ACADM/MCAD antibody [EPR3708] (ab92461)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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