10320 Camino Santa Fe, Suite G
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ACADM Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6827c

Specification

ACADM Antibody (Center) - Product Information

Application	**IF, WB, IHC-P, FC,E**
Primary Accession	P11310
Other Accession	Q8HXY8
Reactivity	**Human, Mouse**
Predicted	**Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**46588**
Antigen Region	**189-217**

ACADM Antibody (Center) - Additional Information

Gene ID 34

Other Names
Medium-chain specific acyl-CoA dehydrogenase, mitochondrial, MCAD, ACADM

Target/Specificity
This ACADM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 189-217 amino acids from the Central region of human ACADM.

Dilution
IF~~1:10~50
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ACADM Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ACADM Antibody (Center) - Protein Information

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Name ACADM (HGNC:89)

Function Medium-chain specific acyl-CoA dehydrogenase is one of the acyl-CoA dehydrogenases that catalyze the first step of mitochondrial fatty acid beta-oxidation, an aerobic process breaking down fatty acids into acetyl-CoA and allowing the production of energy from fats (PubMed:1970566, PubMed:8823175, PubMed:21237683, PubMed:2251268). The first step of fatty acid beta-oxidation consists in the removal of one hydrogen from C-2 and C-3 of the straight-chain fatty acyl-CoA thioester, resulting in the formation of trans-2-enoyl-CoA (PubMed:2251268). Electron transfer flavoprotein (ETF) is the electron acceptor that transfers electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase) (PubMed:25416781, PubMed:15159392). Among the different mitochondrial acyl-CoA dehydrogenases, medium-chain specific acyl-CoA dehydrogenase acts specifically on acyl-CoAs with saturated 6 to 12 carbons long primary chains (PubMed:1970566, PubMed:8823175, PubMed:21237683, PubMed:2251268).

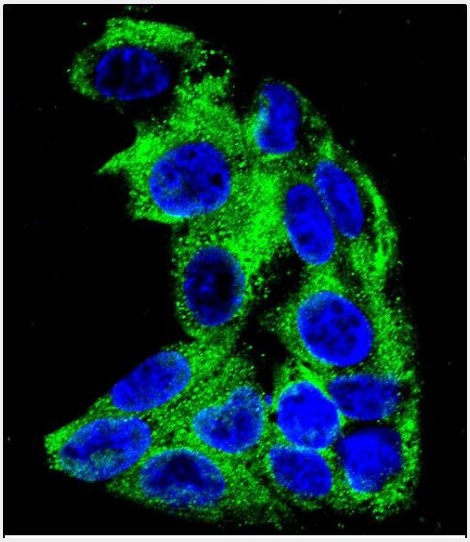
Cellular Location
Mitochondrion matrix

ACADM Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ACADM Antibody (Center) - Images



Confocal immunofluorescent analysis of ACADM Antibody (Center)(Cat#AP6827c) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

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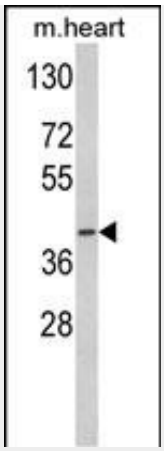
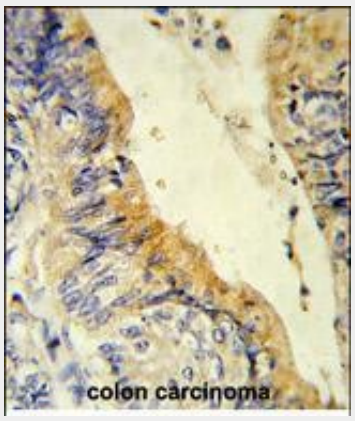
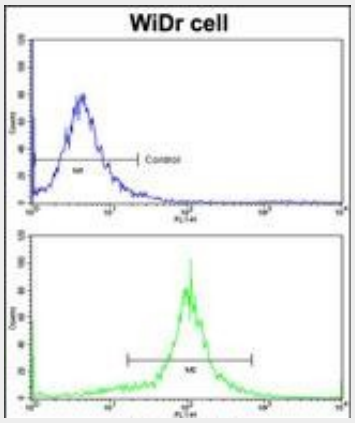


Western blot analysis of ACADM Antibody (Center) (Cat. #AP6827c) in mouse heart tissue lysates (35ug/lane). ACADM (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human colon carcinoma reacted with ACADM Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of widr cells using ACADM Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram)FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ACADM Antibody (Center) - Background

ACADM is the medium-chain specific (C4 to C12 straight chain) acyl-Coenzyme A dehydrogenase. The homotetramer enzyme catalyzes the initial step of the mitochondrial fatty acid beta-oxidation

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pathway.

ACADM Antibody (Center) - References

Ferreira,A.C., et.al., Genet. Mol. Res. 8 (2), 487-493 (2009)