

ACADM Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6827c**Specification**

ACADM Antibody (Center) - Product Information

Application	IF, FC, IHC-P, WB,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
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

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

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 (FAO), breaking down fatty acids into acetyl- CoA and allowing the production of energy from fats (PubMed:[1970566](#), PubMed:[21237683](#), PubMed:[2251268](#), PubMed:[8823175](#)). The first step of FAO consists in the proR-proR stereospecific alpha, beta-dehydrogenation of fatty acyl-CoA thioesters using the electron transfer flavoprotein (ETF) as their physiologic electron acceptor, resulting in the formation of trans-2-enoyl-CoA ((2E)-enoyl-CoA) (PubMed:[2251268](#)). ETF is the electron acceptor that transfers electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase) (PubMed:[15159392](#), PubMed:[25416781](#)). Among the different mitochondrial acyl-CoA dehydrogenases, medium-chain specific acyl-CoA dehydrogenase has preference for fatty acyl-CoAs with saturated 6 to 12 carbons long primary chains, making it but can also catalyze longer chains such as C14 and C16 (PubMed:[1970566](#), PubMed:[21237683](#), PubMed:[2251268](#), PubMed:[8823175](#)).

Cellular Location

Mitochondrion matrix

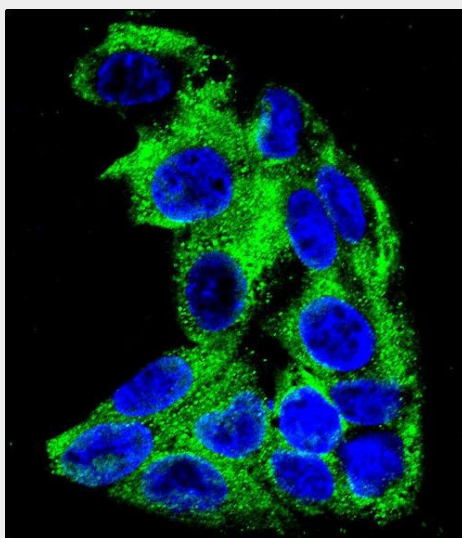
Tissue Location

Expressed ubiquitously with highest levels in heart and muscle.

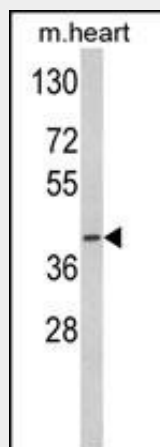
ACADM Antibody (Center) - Protocols

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

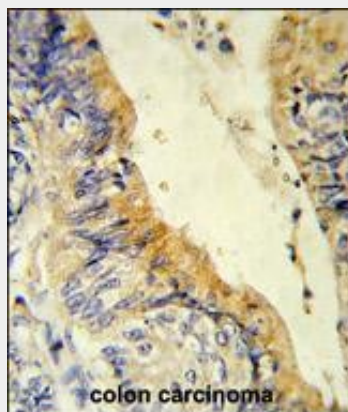
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ACADM Antibody (Center) - Images

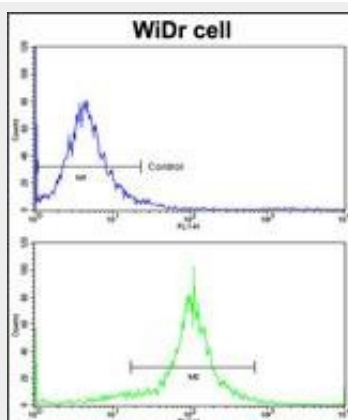
Confocal immunofluorescent analysis of ACADM Antibody (Center)(Cat#AP6827c) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



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 pathway.

ACADM Antibody (Center) - References

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