

# MCAD Polyclonal Antibody

Catalog # AP73207

#### **Product Information**

Application WB Primary Accession P11310

**Reactivity** Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 46588

### **Additional Information**

Gene ID 34

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

MCAD

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **Protein Information**

Name ACADM (<u>HGNC:89</u>)

**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: 21237683, PubMed: 2251268, PubMed: 8823175). 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:15159392, PubMed:25416781). 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:21237683, PubMed:2251268,

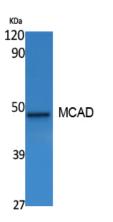
PubMed:<u>8823175</u>).

**Cellular Location** Mitochondrion matrix

## **Background**

Acyl-CoA dehydrogenase specific for acyl chain lengths of 4 to 16 that catalyzes the initial step of fatty acid beta- oxidation. Utilizes the electron transfer flavoprotein (ETF) as an electron acceptor to transfer electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase).

## **Images**



Western Blot analysis of extracts from A549 cells, using MCAD Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.