

**ACADSB Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5336****Specification**

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**ACADSB Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P45954</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=47 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

**ACADSB Antibody (Center) - Additional Information****Gene ID** 36**Antigen Region**  
239-273**Other Names**

Short/branched chain specific acyl-CoA dehydrogenase, mitochondrial, SBCAD, 2-methyl branched chain acyl-CoA dehydrogenase, 2-MEBCAD, 2-methylbutyryl-coenzyme A dehydrogenase, 2-methylbutyryl-CoA dehydrogenase, ACADSB

**Dilution**

WB~~1:1000

**Target/Specificity**

This ACADSB antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 239-273 amino acids from the Central region of human ACADSB.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**

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

**ACADSB Antibody (Center) - Protein Information**

**Name** ACADSB ([HGNC:91](#))**Function**

Short and branched chain specific acyl-CoA dehydrogenase that catalyzes the removal of one hydrogen from C-2 and C-3 of the fatty acyl-CoA thioester, resulting in the formation of trans-2-enoyl-CoA (PubMed:<a href="http://www.uniprot.org/citations/10832746" target="\_blank">10832746</a>, PubMed:<a href="http://www.uniprot.org/citations/11013134" target="\_blank">11013134</a>, PubMed:<a href="http://www.uniprot.org/citations/21430231" target="\_blank">21430231</a>, PubMed:<a href="http://www.uniprot.org/citations/7698750" target="\_blank">7698750</a>). Among the different mitochondrial acyl-CoA dehydrogenases, acts specifically on short and branched chain acyl-CoA derivatives such as (S)-2-methylbutyryl-CoA as well as short straight chain acyl-CoAs such as butyryl-CoA (PubMed:<a href="http://www.uniprot.org/citations/10832746" target="\_blank">10832746</a>, PubMed:<a href="http://www.uniprot.org/citations/11013134" target="\_blank">11013134</a>, PubMed:<a href="http://www.uniprot.org/citations/21430231" target="\_blank">21430231</a>, PubMed:<a href="http://www.uniprot.org/citations/7698750" target="\_blank">7698750</a>). Plays an important role in the metabolism of L- isoleucine by catalyzing the dehydrogenation of 2-methylbutyryl-CoA, one of the steps of the L-isoleucine catabolic pathway (PubMed:<a href="http://www.uniprot.org/citations/10832746" target="\_blank">10832746</a>, PubMed:<a href="http://www.uniprot.org/citations/11013134" target="\_blank">11013134</a>). Can also act on valproyl-CoA, a metabolite of valproic acid, an antiepileptic drug (PubMed:<a href="http://www.uniprot.org/citations/8660691" target="\_blank">8660691</a>).

**Cellular Location**

Mitochondrion matrix

**Tissue Location**

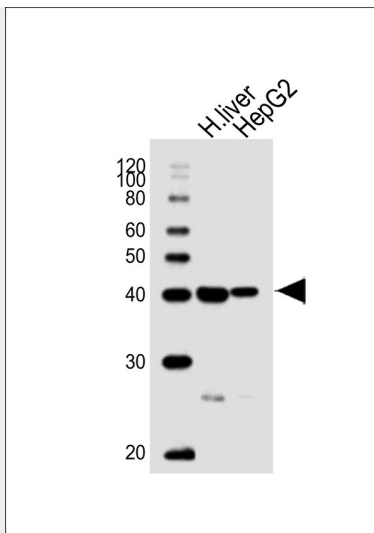
Ubiquitously expressed.

**ACADSB 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](#)

**ACADSB Antibody (Center) - Images**



Western blot analysis of lysates from human liver tissue lysate, HepG2 cell line (from left to right), using ACADSB Antibody (Center) (Cat. #AW5336). AW5336 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

#### ACADSB Antibody (Center) - Background

Has greatest activity toward short branched chain acyl-CoA derivative such as (s)-2-methylbutyryl-CoA, isobutyryl-CoA, and 2-methylhexanoyl-CoA as well as toward short straight chain acyl-CoAs such as butyryl-CoA and hexanoyl-CoA. Can use valproyl-CoA as substrate and may play a role in controlling the metabolic flux of valproic acid in the development of toxicity of this agent.

#### ACADSB Antibody (Center) - References

- Rozen R., et al. *Genomics* 24:280-287(1994).
- Andresen B.S., et al. *Am. J. Hum. Genet.* 67:1095-1103(2000).
- Ota T., et al. *Nat. Genet.* 36:40-45(2004).
- Deloukas P., et al. *Nature* 429:375-381(2004).
- Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.