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ACADSB Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5336

Specification

ACADSB Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P45954
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:10832746, PubMed:11013134, PubMed:21430231, PubMed:7698750). 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:10832746, PubMed:11013134, PubMed:21430231, PubMed:7698750). 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:10832746, PubMed:11013134). Can also act on valproyl-CoA, a metabolite of valproic acid, an antiepileptic drug (PubMed:8660691).

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 Cytomety
- Cell Culture

ACADSB Antibody (Center) - Images

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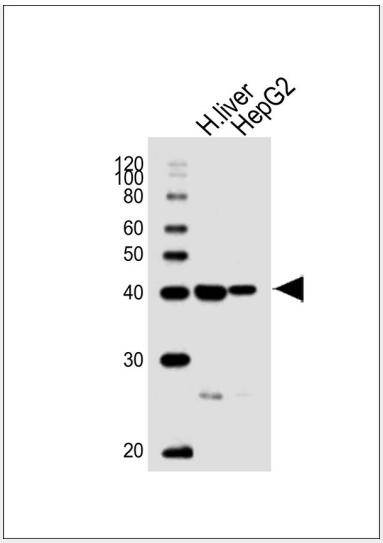

Western blot analysis of lysates from human liver tissue lysate,HepG2 cell line (from left to right), using ACADSB Antibody (Center)(Cat. #AW5336). AW5336 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.

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.