

ACADSB Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20749c

Specification

ACADSB Antibody (Center) - Product Information

Application WB,E
Primary Accession P45954
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

ACADSB Antibody (Center) - Additional Information

Gene ID 36

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

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.

Dilution

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 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 LocationMitochondrion matrix

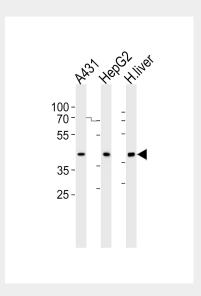
Tissue LocationUbiquitously expressed.

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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ACADSB Antibody (Center) - Images



Western blot analysis of lysates from A431, HepG2 cell line and human liver tissue lysate (from left to right), using ACADSB Antibody (Center) (Cat. #AP20749c). AP20749c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug 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.