

ACADSB Antibody (C-term) Blocking Peptide

Synthetic peptide

Catalog # BP8537b

Specification

ACADSB Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P45954](#)**ACADSB Antibody (C-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP8537b](/products/AP8537b) was selected from the C-term region of human ACADSB. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ACADSB Antibody (C-term) Blocking Peptide - Protein InformationName 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](http://www.uniprot.org/citations/10832746), PubMed: [11013134](http://www.uniprot.org/citations/11013134), PubMed: [21430231](http://www.uniprot.org/citations/21430231), PubMed: [7698750](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10832746), PubMed: [10832746](#)).

[11013134](http://www.uniprot.org/citations/11013134), PubMed:<[21430231](http://www.uniprot.org/citations/21430231)>, PubMed:<[7698750](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10832746)>, PubMed:<[11013134](http://www.uniprot.org/citations/11013134)>). Can also act on valproyl-CoA, a metabolite of valproic acid, an antiepileptic drug (PubMed:<[8660691](http://www.uniprot.org/citations/8660691)>).

Cellular Location

Mitochondrion matrix

Tissue Location

Ubiquitously expressed.

ACADSB Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ACADSB Antibody (C-term) Blocking Peptide - Images**ACADSB Antibody (C-term) Blocking Peptide - Background**

ACADSB 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. This protein 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 (C-term) Blocking Peptide - References

Saenger,A.K., et.al., Biochemistry 44 (49), 16043-16053 (2005)