

ACADSB Blocking Peptide (Center)
Synthetic peptide
Catalog # BP20749c**Specification**

ACADSB Blocking Peptide (Center) - Product InformationPrimary Accession [P45954](#)**ACADSB Blocking Peptide (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

The synthetic peptide sequence is selected from aa 239-253 of HUMAN ACADSB

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 Blocking Peptide (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:7698750, PubMed:11013134, PubMed:21430231, PubMed:10832746). 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:7698750, PubMed:11013134, PubMed:21430231, PubMed:10832746). 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:11013134, PubMed:10832746). 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 Blocking Peptide (Center) - Protocols

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

- [Blocking Peptides](#)

ACADSB Blocking Peptide (Center) - Images**ACADSB Blocking Peptide (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 Blocking Peptide (Center) - References

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Andresen B.S.,et al.Am. J. Hum. Genet. 67:1095-1103(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
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