

# Product information



## ACADSB, 34-432aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP1628

**Full name:** Short/branched chain specific acyl-CoA dehydrogenase, mitochondrial

**Synonyms:** 2-MEBCAD, ACAD7, SBCAD

**NCBI Accession No.:** NP\_001600

**Description:** Short/branched chain specific acyl-CoA dehydrogenase (ACADSB), is a member of the acyl-CoA dehydrogenase family of enzymes that catalyze the dehydrogenation of acyl-CoA derivatives in the metabolism of fatty acids or branch chained amino acids. ACADSB catalyzes the degradation of L-isoleucine and has the highest affinity for (s)-2-methylbutyryl-CoA, isobutyryl-CoA and 2-methylhexanoyl-CoA as substrates. Defects in ACADSB are the cause of short/branched-chain acyl-CoA dehydrogenase deficiency (SBCADD), an autosomal recessive disorder characterized by an increase of 2-methylbutyrylglycine and 2-methylbutyrylcarnitine in blood and urine. Recombinant human ACADSB protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

<p><b>Form:</b> Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 10% glycerol, 1mM DTT</p> <p><b>Molecular Weight:</b> 46.4 kDa (424aa)</p> <p><b>Purity:</b> &gt; 90% by SDS - PAGE</p> <p><b>Concentration:</b> 0.5 mg/ml (determined by Bradford assay)</p>	<p>(kDa) 57 40 28 18 13.5 15% SDS-PAGE (3ug)</p>
--	--

### Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MGS~~H~~MKSSQS EALLNITNNG IHFAPLQFTT DEEMMIKSSV KKFAQEQIAP LVSTMDENSK MEKSVIQGLF  
QQGLMGI EVD PEYGGTGASF LSTVLVIEEL AKVDASVAVF CEIQNTLINT LIRKHGTEEQ KATYLPQLTT EKVGSFCLSE AGAGSDSFAL  
KTRADKEGDY YVLNGSKMWI SSAEHAGLFL VMANVDPTIG YKGITSFLVD RDTPGLHIGK PENKLGLRAS STCPLTFENV KVPEANILGQ  
IGHGYKYAIG SLNEGRIGIA AQMLGLAQGC FDYTIPYIKE RIQFGKRLFD FQGLQHVAH VATQLEAARL LTYNAARLLE AGKPFIKEAS  
MAKYAYASEIA GQTTSKCIEW MGGVGYTKDY PVEKYFRDAK IGTIYEGASN IQLNTIAKHI DAEY

### General references:

Arden K C., *et al.* (1995) *Genomics*. 25: 743-745.

Korman S H., *et al.* (2005) *Clin Chem*. 51: 610-617.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.  
Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

Immuno-Biological Laboratories, Inc. (IBL-America)  
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA  
Phone: (888) 523-1246 Fax: (763) 780-2988  
Email: [info@ibl-america.com](mailto:info@ibl-america.com) Web: [www.ibl-america.com](http://www.ibl-america.com)