

## 32-2105: ACADSB Recombinant Protein

### Alternative Name :

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,ACAD7,SBCAD,2-MEBCAD.

### Description

Source : Escherichia Coli. ACADSB Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 424 amino acids (34-432) and having a molecular mass of 46.4kDa.ACADSB is fused to a 25 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Short/branched chain specific acyl-CoA dehydrogenase (ACADSB) belongs to the acyl-CoA dehydrogenase family of enzymes which 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 while having the highest affinity for (s)-2-methylbutyryl-CoA, isobutyryl-CoA and 2-methylhexanoyl-CoA as substrates. ACADSB may use valproyl-CoA as substrate and have a role in regulating the metabolic flux of valproic acid in the development of toxicity of this agent. ACADSB gene defects cause the short/branched-chain acyl-CoA dehydrogenase deficiency (SBCADD), which is an autosomal recessive disorder characterized by an increase of 2-methylbutyrylglycine and 2-methylbutyrylcarnitine in blood and urine.

### Product Info

**Amount :** 10 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** The ACADSB solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.1M NaCl, 10% glycerol and 1mM DTT.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.

**Amino Acid :** MGSSHHHHHH SGLVPRGSH MGSMMKSSQS EALLNITNNG IHFAPLQFTT DEEMMIKSSV KKFAQEIQIAP LVSTMDENSK MEKSVIQGLF QQGLMGIEVD 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 AGKPFKEAS MAKYYASEIA GQTTSKCIEW MGGVGYTKDY PVEKYFRDAK IGTIYEGASN IQLNTIAKHI DAEY.

