

Recombinant Human Acyl-CoA Dehydrogenase, Long Chain, His-tagged

Cat. No. ACADL-1278H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human ACADL protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Human
Source	Human
Description	ACADL belongs to the acyl-CoA dehydrogenase family, existing as a homotetramer. It is involved in the catabolism of fatty acids and amino acids and they provide a major source of energy for the heart and skeletal muscle. Defect in the gene encoding ACADL leads to non-ketotic hypoglycemia and hypotonia, muscle weakness.
Form	Liquid. In 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 30% glycerol, 0.1 M NaCl.
Molecular Weight	46.7 kDa (421aa), confirmed by MALDI-TOF
Purity	> 85 % by SDS-PAGE
Concentration	1 mg/ml (determined by Bradford)
Sequences of amino acids	MGSSHHHHHH SSGLVPRGSH MGGEERLETP SAKKLTDIGI RRIFSPEHDI FRKSVRKFFQ EEVIPHHSEW EKAGEVSREV WEKAGKQGLL GVNIAEHLGG IGGDLYSAAI VWEEQAYSNC SGPGFSIHSG IVMSYITNHG SEEQIKHFIP

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

QMTAGKCIGA IAMTEPGAGS DLQGIKTNAK KDGSDWILNG SKVFISNGSL
SDVVIVVAVT NHEAPSPAHG ISLFLVENGM KGFIKGRKLH KMGLKAQDTA
ELFFEDIRLP ASALLGEENK GFYYIMKELP QERLLIADVA ISASEFMFEE
TRNYVKQRKA FGKTVAHLQT VQHKLAELKT HICVTRAFVD NCLQLHEAKR
LDSATACMAK YWASELQNSV AYDCVQLHGG WGYMWEYPIA KAYVDARVQP
IYGGTNEIMK ELIAREIVFD K

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.

Pathways

Beta oxidation of lauroyl-CoA to decanoyl-CoA-CoA; Fatty acid metabolism; Fatty acid, triacylglycerol, and ketone body metabolism; Metabolic pathways; Metabolism of lipids and lipoproteins; Mitochondrial Fatty Acid Beta-Oxidation; PPAR signaling pathway; mitochondrial fatty acid beta-oxidation of saturated fatty acids

GENE INFORMATION

Gene Name

ACADL acyl-CoA dehydrogenase, long chain [Homo sapiens]

Official Symbol

ACADL

Synonyms

ACADL; acyl-CoA dehydrogenase, long chain; long-chain specific acyl-CoA dehydrogenase, mitochondrial; OTTHUMP00000163937; acyl-Coenzyme A dehydrogenase, long chain; LCAD; ACAD4; FLJ94052

Gene ID

33

mRNA Refseq

NM_001608

Protein Refseq

NP_001599

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

MIM	609576
UniProt ID	P28330
Chromosome Location	2q34-q35
Function	acyl-CoA dehydrogenase activity; fatty-acyl-CoA binding; flavin adenine dinucleotide binding; long-chain-acyl-CoA dehydrogenase activity; palmitoyl-CoA oxidase activity
PDB rendering based on 2he3.	