

Recombinant Human ACADL protein, His-tagged

Cat. No. ACADL-1279H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ACADL(33 - 430 aa) fused with His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	33 - 430 aa
Description	The protein encoded by this gene belongs to the acyl-CoA dehydrogenase family, which is a family of mitochondrial flavoenzymes involved in fatty acid and branched chain amino-acid metabolism. This protein is one of the four enzymes that catalyze the initial step of mitochondrial beta-oxidation of straight-chain fatty acid. Defects in this gene are the cause of long-chain acyl-CoA dehydrogenase (LCAD) deficiency, leading to nonketotic hypoglycemia.
Form	The purified protein was Lyophilized from sterile PBS (58mM Na ₂ HPO ₄ , 17mM NaH ₂ PO ₄ , 68mM NaCl, pH7.). Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization.
AA Sequence	EERLETPSAKKLTDIGIRRIFSP EHDIFRKSVRKFFQEEVIPHHSEWEKAGEVSREVV EKAGKQGLLGVNIAEHLGGIGGDLYSAAIWEEQAYSNCSGPGFSIHSGIVMSYITNH GSEEQIKHFIPQMTAGKCIGAIAMTEPGAGSDLQGIKTNAKKDGSDWILNGSKVFISN GSLSDVVIVVAVTNHEAPSPAHGISLFLVENG MKGFIKGRKLHKMGLKAQDTAELFF EDIRLPASALLGEENKGFYIMKELPQERLLIADVAISASEFMFEETRNYVKQRKAFG

 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

KTVAHLQTVQHKLAELKTHICVTRAFVDNCLQLHEAKRLDSATACMAKYWASELQN
SVAYDCVQLHGGWGYMWEYPIAKAYVDARVQPIYGGTNEIMKELIAREIVFDK

Purity

95%, by SDS-PAGE with Coomassie Brilliant Blue staining.

Storage

Stability and Storage:

Store for up to 12 months at -20 centigrade to -80 centigrade as lyophilized powder.

Storage of Reconstituted Protein:

Short-term storage: Store at 2-8 centigrade for two weeks.

Long-term storage: Aliquot and store at -20 centigrade to -80 centigrade for up to 6 months, buffer containing 50% glycerol is recommended for reconstitution. Avoid repeat freeze-thaw cycles.

Reconstitution

Reconstitute at 0.25 g/μl in 200 μl sterile water for short-term storage.

Reconstitution with 200 μl 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details).

If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used).

Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature (see below).

GENE INFORMATION

Gene Name

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

Official Symbol

ACADL

 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

Synonyms	ACADL; acyl-CoA dehydrogenase, long chain; acyl Coenzyme A dehydrogenase, long chain; long-chain specific acyl-CoA dehydrogenase, mitochondrial; ACAD4; LCAD; acyl-Coenzyme A dehydrogenase, long chain; FLJ94052;
Gene ID	33
mRNA Refseq	NM_001608
Protein Refseq	NP_001599
MIM	609576
UniProt ID	P28330
Chromosome Location	2q34-q35
Pathway	Beta oxidation of lauroyl-CoA to decanoyl-CoA-CoA, organism-specific biosystem; Beta oxidation of myristoyl-CoA to lauroyl-CoA, organism-specific biosystem; Fatty Acid Beta Oxidation, organism-specific biosystem; Fatty acid metabolism, organism-specific biosystem; Fatty acid metabolism, conserved biosystem; Fatty acid, triacylglycerol, and ketone body metabolism, organism-specific biosystem; Metabolic pathways, organism-specific biosystem;
Function	acyl-CoA dehydrogenase activity; fatty-acyl-CoA binding; flavin adenine dinucleotide binding; long-chain-acyl-CoA dehydrogenase activity; palmitoyl-CoA oxidase activity;