Recombinant human ACADS protein

Catalog Number: ATGP0441

PRODUCT INFORMATION

Expression system
E.coli

Domain
25-412aa

UniProt No.
P16219

NCBI Accession No.
AAH25963

Alternative Names
Acyl-Coenzyme A dehydrogenase, ACAD3, SCAD, Acyl-Coenzyme A dehydrogenase Acyl Coenzyme A dehydrogenase, C2 to C3 short chain, Acyl-CoA dehydrogenase, C2 to C3 short chain, Acyl-CoA dehydrogenase, short chain, Acyl-Coenzyme A dehydrogenase, short chain, AI196007, Bcd-1, Bcd1, Butyryl CoA dehydrogenase, EC 1.3.99.2, Short chain acyl CoA dehydrogenase, unsaturated acyl CoA reductase, Short-chain specific acyl-CoA dehydrogenase, mitochondrial.

PRODUCT SPECIFICATION

Molecular Weight
44.0 kDa (409aa) confirmed by MALDI-TOF

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT 0.1 M Nacl, and 20% glycerol

Purity
> 95% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
ACADS (Acyl-Coenzyme A dehydrogenase), also known as SCAD or ACAD3, is a tetrameric mitochondrial flavoprotein, which is a member of the acyl-CoA dehydrogenase family. This enzyme catalyzes the initial step of

Recombinant human ACADS protein

Catalog Number: ATGP0441

the mitochondrial fatty acid beta-oxidation pathway. Mutations of ACADS have been associated with fatty acid oxidation defects and metabolic diseases such as short-chain acyl-CoA dehydrogenase deficiency (SCAD deficiency). Recombinant human ACADS protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

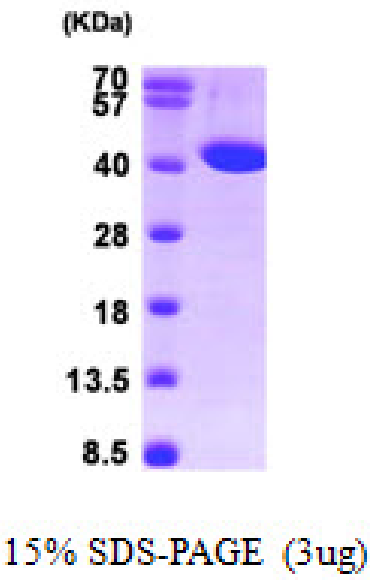
MGSSHHHHHH SSGLVPRGSH MLHTIYQSVE LPETHQMLLQ TCRDFAEKEL FPIAAQVDKE HLFPAAQVKK MGGLGLLAMD VPEELGGAGL DYLAYAIAME EISRGCASTG VIMSVNNSLY LGPILKFGSK EQKQAWVTPF TSGDKIGCFA LSEPGNGSDA GAASTTARAE GDSWVLNGTK AWITNAWEAS AAVVFASTDR ALQNKSISAF LVPMPTPGLT LGKKEDKLGI RGSSTANLIF EDCRIPKDSI LGEPGMGFKI AMQTLDMGRI GIASQALGIA QTALDCAVNY AENRMAFGAP LTKLQVIQFK LADMALALES ARLLTWRAAM LKDNKKPFIK EAAMAKLAAS EAATAISHQA IQILGGMGYV TEMPAERHYR DARITEIYEG TSEIQRLVIA GHLLRSYRS

General References

McAndrew RP., et al. (2008) J Biol Chem. 283(14):9435-43.
Tafti M., et al. (2003) Nat Genet. 34(3):320-5.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.