

# Product information



## ACADS, 25-412 aa

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

Cat. No. IBATGP0441

**Full Name:** Acyl-Coenzyme A dehydrogenase

**NCBI Accession No.:** AAH25963

**Synonyms:** ACAD3, SCAD

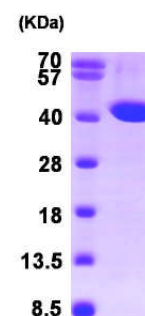
**Description:** ACADS (Acyl-Coenzyme A dehydrogenase), also known as SCAD or ACAD3, is a tetrameric mitochondrial flavoprotein, which is a member of the acyl-CoA dehydrogenase family. This enzyme catalyzes the initial step of the mitochondrial fatty acid beta-oxidation pathway. Mutations of ACADS have 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.

**Form:** Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 1mM DTT  
0.1 M NaCl, and 20% glycerol

**Molecular Weight:** 44.0 kDa (409aa)

**Purity:** > 95% by SDS - PAGE

**Concentration:** 0.5 mg/ml (determined by Bradford assay)



15% SDS-PAGE (3ug)

### Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MLHTIYQSVE LPETHQMLLQ TCRDFAEKEL FPIAAQVDKE HLFPAQVKK MGGLGLLAMD VPEELGGAGL  
DYLAYAIAME EISRGCASTG VIMSVNNSLY LGPILKFGSK EQKQAWVTPF TSGDKIGCFA LSEPGNGSDA GAASTTARAE GDSWVLNGTK  
AWITNAWEAS AAVVFASTDR ALQNKISAF LVPMPPTGLT LGKKEDKLG I RGSSTANLIF EDCRIPKDSI LGEPGMGFKI AMQTLDMGRI  
GIASQALGIA QTALDCAVNY AENRMAFGAP LTKLQVIQFK LADMALALES ARLLTWRAAM LKDNKKPF IK EAAMAKLAAS EAATAISHQA  
IQILGGMGYV TEMPAERHYR DARITEIYEG TSEIQRLVIA GHLLRSYRS

### General references:

**WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN, DIAGNOSTICS OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.**

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McAndrew RP., *et al.* (2008) *J Biol Chem.* 283(14):9435-43.

Tafti M., *et al.* (2003) *Nat Genet.* 34(3):320-5.

**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.

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