PRODUCT INFORMATION

Expression system E.coli

Domain 26-421aa

UniProt No. P11310

NCBI Accession No. NP_000007

Alternative Names

Medium-chain specific acyl-CoA dehydrogenase, ACAD1, CAD, MCADH, Medium-chain specific acyl-CoA dehydrogenase, ACAD 1, Acyl Coenzyme A Dehydrogenase, Acyl coenzyme A dehydrogenase C 4 to C 12 straight chain, C4 to C12 Straight Chain, FLJ18227, FLJ93013, FLJ99884, MCAD, Medium chain acyl CoA dehydrogenase, Medium chain fatty acyl CoA dehydrogenase, Medium chain specific acyl CoA dehydrogenase mitochondrial

PRODUCT SPECIFICATION

Molecular Weight

45.9 kDa (417aa) confirmed by MALDI-TOF

Concentration 0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol 0.1M NaCl

Purity > 90% 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

ACADM, also known as acyl-Coenzyme A dehydrogenase is an enzyme that is important for breaking down (degrading) a certain group of fats called medium-chain fatty acids. It is essential for converting these particular



fatty acids to energy, especially during periods without food (fasting). This protein functions in mitochondria, the energy-producing centers within cells. It is found in the mitochondria of several types of tissues, particularly the liver. Recombinant human ACADM 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 MKANRQREPG LGFSFEFTEQ QKEFQATARK FAREEIIPVA AEYDKTGEYP VPLIRRAWEL GLMNTHIPEN CGGLGLGTFD ACLISEELAY GCTGVQTAIE GNSLGQMPII IAGNDQQKKK YLGRMTEEPL MCAYCVTEPG AGSDVAGIKT KAEKKGDEYI INGQKMWITN GGKANWYFLL ARSDPDPKAP ANKAFTGFIV EADTPGIQIG RKELNMGQRC SDTRGIVFED VKVPKENVLI GDGAGFKVAM GAFDKTRPVV AAGAVGLAQR ALDEATKYAL ERKTFGKLLV EHQAISFMLA EMAMKVELAR MSYQRAAWEV DSGRRNTYYA SIAKAFAGDI ANQLATDAVQ ILGGNGFNTE YPVEKLMRDA KIYQIYEGTS QIQRLIVARE HIDKYKN

General References

Gregersen N., et al. (2001) Hum Mutat. 18(3):169-89.

DATA



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