Recombinant human ACAA protein

Catalog Number: ATGP0674

PRODUCT INFORMATION

Expression system
E.coli

Domain
27-424aa

UniProt No.
P09110

NCBI Accession No.
NP_001598

Alternative Names
3-ketoacyl-CoA thiolase peroxisomal, ACAA, PTHIO, THIO, 3-ketoacyl-CoA thiolase, peroxisomal

PRODUCT SPECIFICATION

Molecular Weight
43.8 kDa (419aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol 1mM DTT, 0.1M NaCl

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
ACAA1 is a member of the thiolase family of enzymes and is involved in lipid metabolism. This protein is localized to the peroxisome and catalyzes the conversion of acyl-CoA and acetyl-CoA to 3-oxoacyl-CoA in the fatty acid oxidation pathway. ACAA1 shows high enzymatic activity in liver, kidney, intestine and white adipose tissue in rats. Deficiency of this enzyme leads to pseudo-Zellweger syndrome. Recombinant human ACAA1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

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Amino acid Sequence

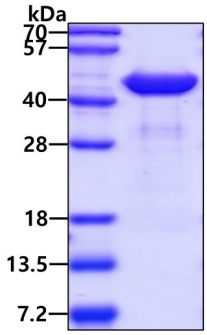
<MGSSHHHHHH SSGLVPRGSH> MLSGAPQASA ADVVVVHGRR TAICRAGRGG FKDTTPDELL SAVMTAVLKD VNLRPEQLGD ICVGNVLQPG AGAIMARIAQ FLSDIPETVP LSTVNRQCSS GLQAVASIAG GIRNGSYDIG MACGVESMSL ADRGNPGNIT SRLMEKEKAR DCLIPMGITS ENVAERFGIS REKQDTFALA SQQKAARAQS KGCFQAEIVP VTTTVHDDKG TKRSITVTQD EGIRPSTTME GLAKLKPAFK KDGSTTAGNS SQVSDGAAAI LLARRSKAEE LGLPILGVLR SYAVVGVPPD IMGIGPAYAI PVALQKAGLT VSDVDIFEIN EAFASQAAYC VEKLRLPPEK VNPLGGAVAL GHPLGCTGAR QVITLLNELK RRGKRAYGVV SMCIGTGMGA AAVFEYPGN

General References

Bout A., et al. (1991) Biochim Biophys Acta. 1090(1):43-51.
Patel S., et al. (2003) Eur Respir J. 22(5):755-60.

DATA

SDS-PAGE



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