## PRODUCT INFORMATION

## Expression system

E.coli

## Domain

1-397aa
UniProt No.
Q9BWD1
NCBI Accession No.
NP_005882

## Alternative Names

Acetyl-CoA acetyltransferase cytosolic, ACTL, Acetyl-CoA acetyltransferase, cytosolic

## PRODUCT SPECIFICATION

## Molecular Weight

45.4 kDa (433aa) confirmed by MALDI-TOF

## Concentration

1mg/ml (determined by Bradford assay)

## Formulation

Liquid in. 20 mM Tris- HCl buffer (pH 8.0) containing $0.1 \mathrm{M} \mathrm{NaCl}, 1 \mathrm{mM} \mathrm{DTT,10} \mathrm{\%} \mathrm{glycerol}$

## Purity

> 95\% by SDS-PAGE

## Tag

His-Tag

## Application

SDS-PAGE

## Storage Condition

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

## BACKGROUND

## Description

ACAT2 is an enzyme involved in lipid metabolism. It participates in lipoprotein assembly, catalyzing cholesterol esterification in mammalian cells. ACAT2 is an integral membrane protein that localizes to the endoplasmic reticulum of human intestinal cells. ACAT2 deficiency contributes to severe mental retardation and hypotonus. Recombinant human ACAT2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSMNAG SDPVVIVSAA RTIIGSFNGA LAAVPVQDLG STVIKEVLKR ATVAPEDVSE VIFGHVLAAG CGQNPVRQAS VGAGIPYSVP AWSCQMICGS GLKAVCLAVQ SIGIGDSSIV VAGGMENMSK APHLAYLRTG VKIGEMPLTD SILCDGLTDA FHNCHMGITA ENVAKKWQVS REDQDKVAVL SQNRTENAQK AGHFDKEIVP VLVSTRKGLI EVKTDEFPRH GSNIEAMSKL KPYFLTDGTG TVTPANASGI NDGAAAVVLM KKSEADKRGL TPLARIVSWS QVGVEPSIMG IGPIPAIKQA VTKAGWSLED VDIFEINEAF AAVSAAIVKE LGLNPEKVNI EGGAIALGHP LGASGCRILV TLLHTLERMG RSRGVAALCI GGGMGIAMCV QRE

## General References

Alger HM., et al. (2010) J Biol Chem. 285(19):14267-74.
Bryleva EY., et al. (2010) Proc Natl Acad Sci u S A. 107(7):3081-6.

DATA

SDS-PAGE


15\% SDS-PAGE (3ug)

