

**Product:** ACAA1 (3-ketoacyl-CoA thiolase, peroxisomal, 27-424aa, His-tagged), human  
**Catalog #:** 01-1911-1  
**Amount:** 20 µg

**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.

**Full name:** 3-ketoacyl-CoA thiolase, peroxisomal

**Synonyms:** ACAA, PTHIO, THIO

**AA Sequence:**

MGSSHHHHHH SSGLVPRGSH MLGAPQASA 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  
 SYAVVGVPD IMGIGPAYAI PVALQKAGLT VSDVDIFEIN EAFASQAAYC VEKLRLPPEK  
 VNPLGGAVAL GHPLGCTGAR QVITLLNELK RRGKRAYGVV SMCIGTGMGA AAVFEYPGN

**SOURCE:** Recombinant, His-tagged (N), *E. coli* expression system  
**MOLECULAR WEIGHT:** 43.8 kDa (419aa), confirmed by MALDI-TOF  
**PURITY:** > 95% by SDS PAGE  
**FORM:** Purified, in 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol, 1mM DTT, 0.1M NaCl

**ENDOTOXIN:**

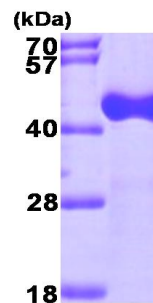
**CONCENTRATION:** 1 mg/ml (Bradford Assay)

**STORAGE:** -20°C (aliquot), Avoid repeated freeze and thaw cycles

**REFERENCE:**

Bout A., et al. (1991) *Biochim Biophys Acta.* 1090(1):43-51

Patel S., et al. (2003) *Eur Respir J.* 22(5):755-760



15% SDS-PAGE (3ug)