

## Recombinant Human ACAT2, His-tagged

Cat. No. ACAT2-776H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant human ACAT2 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques. MW =45.4 kDa (433aa) confirmed by MALDI-TOF.

**Species** Human

**Source** E.coli

**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.

**Sequences Of Amino Acids**

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

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<b>Purity</b>	> 95% by SDS – PAGE.
<b>Form</b>	Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 0.1M NaCl, 1mM DTT, 10% glycerol.
<b>Concentration</b>	1 mg/ml (determined by Bradford assay).
<b>Storage</b>	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.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">ACAT2 acetyl-CoA acetyltransferase 2 [ Homo sapiens ]</a>
<b>Synonyms</b>	ACAT2; acetyl-CoA acetyltransferase 2; acetyl-Coenzyme A acetyltransferase 2; Acetyl-CoA acetyltransferase, cytosolic; Cytosolic acetoacetyl-CoA thiolase; Acetyl-CoA transferase-like protein; EC 2.3.1.9; OTTHUMP00000017527; Cytosolic acetoacetyl-CoA thiolase; acetoacetyl Coenzyme A thiolase; acetyl-Coenzyme A acetyltransferase 2; acetyl-Coenzyme A acetyltransferase 2 (acetoacetyl Coenzyme A thiolase)
<b>Gene ID</b>	<a href="#">39</a>
<b>mRNA Refseq</b>	<a href="#">NM_005891</a>
<b>Protein Refseq</b>	<a href="#">NP_005882</a>
<b>MIM</b>	<a href="#">100678</a>
<b>UniProt ID</b>	<a href="#">Q9BWD1</a>

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<b>Chromosome Location</b>	6q25.3
<b>Pathway</b>	Benzoate degradation via CoA ligation; Butanoate metabolism; Fatty acid metabolism; Lysine degradation; Metabolic pathways; Propanoate metabolism; Pyruvate metabolism; Synthesis and degradation of ketone bodies; Terpenoid backbone biosynthesis; Tryptophan metabolism; Valine, leucine and isoleucine degradation
<b>Function</b>	acetyl-CoA C-acetyltransferase activity; acyltransferase activity; protein binding; transferase activity

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