

## Datasheet

### ACAT1 polyclonal antibody

**Catalog Number:** PAB2959

**Regulatory Status:** For research use only (RUO)

**Product Description:** Rabbit polyclonal antibody raised against synthetic peptide of ACAT1.

**Immunogen:** A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human ACAT1.

**Host:** Rabbit

**Reactivity:** Human

**Applications:** IHC-P, WB-Ce  
(See our web site product page for detailed applications information)

**Protocols:** See our web site at  
<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Form:** Liquid

**Purification:** Ammonium sulfate precipitation

**Recommend Usage:** Western Blot (1:1000)  
Immunohistochemistry (1:10-50)  
The optimal working dilution should be determined by the end user.

**Storage Buffer:** In PBS (0.09% sodium azide)

**Storage Instruction:** Store at 4°C. For long term storage store at -20°C.  
Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 38

**Gene Symbol:** ACAT1

**Gene Alias:** ACAT, MAT, T2, THIL

**Gene Summary:** This gene encodes a mitochondrially localized enzyme that catalyzes the reversible formation of acetoacetyl-CoA from two molecules of acetyl-CoA. Defects in this gene are associated with 3-ketothiolase deficiency, an inborn error of isoleucine catabolism

characterized by urinary excretion of 2-methyl-3-hydroxybutyric acid, 2-methylacetoacetic acid, tiglylglycine, and butanone. [provided by RefSeq]

#### References:

1. Androgen-mediated cholesterol metabolism in LNCaP and PC-3 cell lines is regulated through two different isoforms of acyl-coenzyme A:Cholesterol Acyltransferase (ACAT). Locke JA, Wasan KM, Nelson CC, Guns ES, Leon CG. Prostate. 2008 Jan 1;68(1):20-33.
2. Functionality of the seventh and eighth transmembrane domains of acyl-coenzyme A:cholesterol acyltransferase 1. Guo ZY, Chang CC, Chang TY. Biochemistry. 2007 Sep 4;46(35):10063-71. Epub 2007 Aug 11.
3. Crystallographic and kinetic studies of human mitochondrial acetoacetyl-CoA thiolase: the importance of potassium and chloride ions for its structure and function. Haapalainen AM, Merilainen G, Pirila PL, Kondo N, Fukao T, Wierenga RK. Biochemistry. 2007 Apr 10;46(14):4305-21. Epub 2007 Mar 20.