

## Rabbit ACAT1 Polyclonal Antibody | anti-ACAT1 antibody

Anti-ACAT1 Antibody Picoband

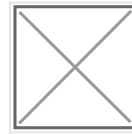
| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                                                                                                         |
|-----------|--------|-------------------|----------------------------------------------------------------------------------------------------------------------|
| AAA19765  | Rabbit | Human, Mouse, Rat | Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA |

### PRODUCT SYNONYMS

ACAT1; Polyclonal Antibody; Anti-ACAT1 Antibody Picoband; Bifunctional epoxide hydrolase 2; Cytosolic epoxide hydrolase 2; CEH; 3.3.2.10; Epoxide hydratase; Soluble epoxide hydrolase; SEH; Lipid-phosphate phosphatase; 3.1.3.76; EPHX2; anti-ACAT1 antibody

### PRODUCT SPECIFICATIONS

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Reactivity                                      | Human, Mouse, Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Clonality                                       | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Isotype                                         | Rabbit IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity                                     | Ubiquitous. A high level expression is seen in secretory tissues.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Purity/Purification                             | Immunogen affinity purified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Form/Format                                     | Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Applicable Applications for anti-ACAT1 antibody | WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Application Notes                               | WB: 0.25-0.5ug/ml, Human, Mouse, Rat<br>IHC(Paraffin-embedded Section): 2-5ug/ml, Human<br>ICC/IF: 5ug/ml, Human<br>FC/FACS (Fixed): 1-3ug/1x10 <sup>6</sup> cells, Human<br>ELISA: 0.1-0.5ug/ml                                                                                                                                                                                                                                                                                                                                                                                                                |
| Immunogen                                       | E coli-derived human ACAT1 recombinant protein (Position: S10-Q404).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Subcellular Localization                        | Cytoplasm. Peroxisome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Reconstitution                                  | Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Cross Reactivity                                | No cross-reactivity with other proteins.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Protein Function                                | Bifunctional enzyme. The C-terminal domain has epoxide hydrolase activity and acts on epoxides (alkene oxides, oxiranes) and arene oxides. Plays a role in xenobiotic metabolism by degrading potentially toxic epoxides. Also determines steady-state levels of physiological mediators. The N-terminal domain has lipid phosphatase activity, with the highest activity towards threo- 9,10-phosphonoxy-hydroxy-octadecanoic acid, followed by erythro- 9,10-phosphonoxy-hydroxy-octadecanoic acid, 12-phosphonoxy- octadec-9Z-enoic acid, 12-phosphonoxy-octadec-9E-enoic acid, and p-nitrophenyl phosphate. |
| Preparation and Storage                         | At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.                                                                                                                                                                                                                                                                                                                                                                                          |



### IF (Immunofluorescence)

Figure 5. IF analysis of ACAT1 using anti-ACAT1 antibody (AAA19765).ACAT1 was detected in an immunocytochemical section of HELA cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent ( epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-ACAT1 Antibody (AAA19765) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit ( epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-ACAT1 Antibody (AAA19765) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit ( epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-ACAT1 Antibody (AAA19765) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit ( epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-ACAT1 Antibody (AAA19765) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Lane 2: human PC-3 whole cell lysates,Lane 3: human A549 whole cell lysates,Lane 4: human MCF-7 whole cell lysates,Lane 5: rat heart tissue lysates,Lane 6: rat skeletal muscle tissue lysates,Lane 7: mouse heart tissue lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ACAT1 antigen affinity purified polyclonal antibody (#AAA19765) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ACAT1 at approximately 40 kDa. The expected band size for ACAT1 is at 40 kDa.

|                                         |                                                                                                                                                                                       |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Molecular Weight</b>                 | 45,200 Da                                                                                                                                                                             |
| <b>NCBI Official Full Name</b>          | acetyl-CoA acetyltransferase, mitochondrial                                                                                                                                           |
| <b>NCBI Official Synonym Full Names</b> | acetyl-CoA acetyltransferase 1                                                                                                                                                        |
| <b>NCBI Official Symbol</b>             | ACAT1                                                                                                                                                                                 |
| <b>NCBI Official Synonym Symbols</b>    | T2; MAT; ACAT; THIL                                                                                                                                                                   |
| <b>NCBI Protein Information</b>         | acetyl-CoA acetyltransferase, mitochondrial; acetoacetyl-CoA thiolase; acetoacetyl Coenzyme A thiolase; acetyl-Coenzyme A acetyltransferase 1; mitochondrial acetoacetyl-CoA thiolase |
| <b>UniProt Protein Name</b>             | Acetyl-CoA acetyltransferase, mitochondrial                                                                                                                                           |
| <b>UniProt Gene Name</b>                | <b>ACAT1</b>                                                                                                                                                                          |
| <b>UniProt Synonym Gene Names</b>       | ACAT; MAT                                                                                                                                                                             |
| <b>UniProt Entry Name</b>               | THIL_HUMAN                                                                                                                                                                            |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/acad1-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-elisa/19765>