# ACAT-1 Monoclonal Antibody

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| **Catalog No** | YP-mAb-03679 |
| **Isotype** | IgG |
| **Reactivity** | Human;Mouse;Rat |
| **Applications** | WB |
| **Gene Name** | ACAT1 |
| **Protein Name** | Acetyl-CoA acetyltransferase mitochondrial |
| **Immunogen** | The antiserum was produced against synthesized peptide derived from human ACAT1. AA range:221-270 |
| **Specificity** | ACAT-1 Monoclonal Antibody detects endogenous levels of ACAT-1 protein. |
| **Formulation** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Source** | Monoclonal, Mouse,IgG |
| **Purification** | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen. |
| **Dilution** | WB 1:500-1:2000 |
| **Concentration** | 1 mg/ml |
| **Purity** | ≥90% |
| **Storage Stability** | -20°C/1 year |
| **Synonyms** | ACAT1; ACAT; MAT; Acetyl-CoA acetyltransferase; mitochondrial; Acetoacetyl-CoA thiolase; T2 |
| **Observed Band** | 45kD |
| **Cell Pathway** | Mitochondrion . |
| **Tissue Specificity** | Adipocyte,Brain,Fetal brain cortex, |
| **Function** | catalytic activity:2 acetyl-CoA = CoA + acetoacetyl-CoA.,disease:Defects in ACAT1 are a cause of 3-ketothiolase deficiency (3KTD) [MIM:203750]; also known as alpha-methylacetoaceticaciduria. 3KTD is an inborn error of isoleucine catabolism characterized by intermittent ketoacidotic attacks associated with unconsciousness. Some patients die during an attack or are mentally retarded. Urinary excretion of 2-methyl-3-hydroxybutyric acid, 2-methylacetoacetic acid, triglylglycine, butanone is increased. It seems likely that the severity of this disease correlates better with the environmental or acquired factors than with the ACAT1 genotype.,enzyme regulation:Activated by potassium ions, but not sodium ions.,function:Plays a major role in ketone body metabolism.,similarity:Belongs to the thiolase family.,subunit:Homotetramer., |
| **Background** | 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 |

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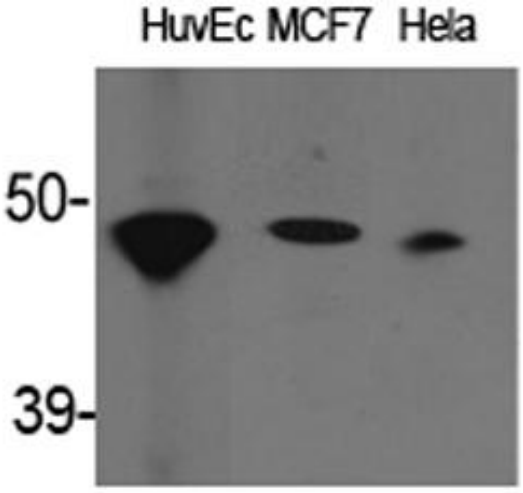
| | of isoleucine catabolism characterized by urinary excretion of 2-methyl-3-hydroxybutyric acid, 2-methylacetoacetic acid, tiglylglycine, and butanone. [provided by RefSeq, Feb 2009], |
| **matters needing attention** | Avoid repeated freezing and thawing! |
| **Usage suggestions** | This product can be used in immunological reaction related experiments. For more information, please consult technical personnel. |

## Products Images




Western Blot analysis of various cells using ACAT-1 Monoclonal Antibody