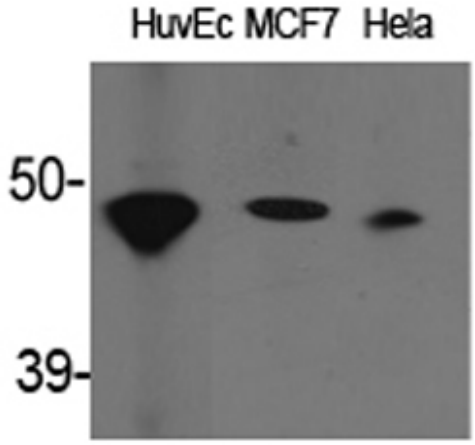
ACAT-1 Polyclonal Antibody

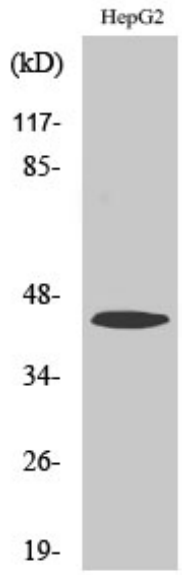
Catalog No	YP-Ab-03679
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	ACAT1
Protein Name	Acetyl-CoA acetyltransferase mitochondrial
Immunogen	The antiserum was produced against synthesized peptide derived from human ACAT1. AA range:221-270
Specificity	ACAT-1 Polyclonal Antibody detects endogenous levels of ACAT-1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
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

	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.

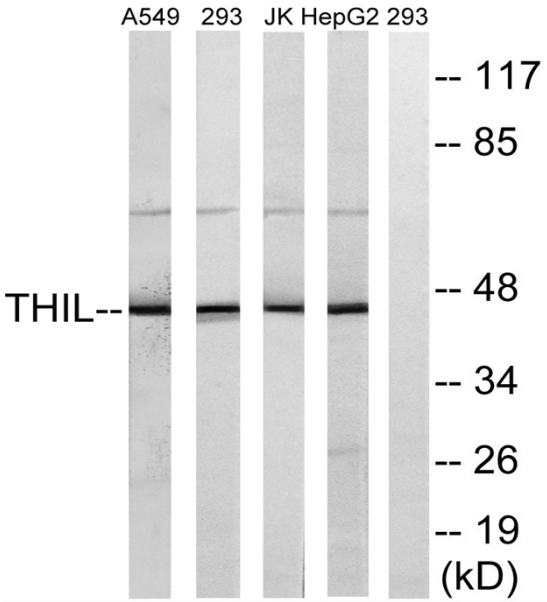
Products Images



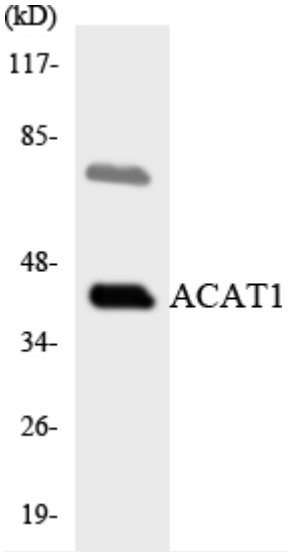
Western Blot analysis of various cells using ACAT-1 Polyclonal Antibody



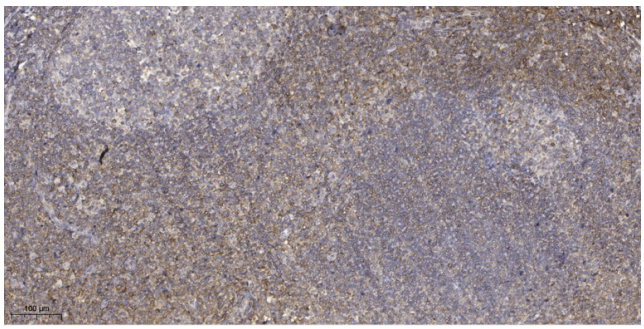
Western Blot analysis of A549 cells using ACAT-1 Polyclonal Antibody



Western blot analysis of lysates from HepG2, Jurkat, 293, and A549 cells, using ACAT1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HepG2 cells using ACAT1 antibody.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).