

Basic Information

Product Name	Anti-ACAT2 Antibody
Gene Name	ACAT2
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, FCM, ELISA
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human ACAT2 recombinant protein (Position: Q31-E397).
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	41 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA):1:100-1000

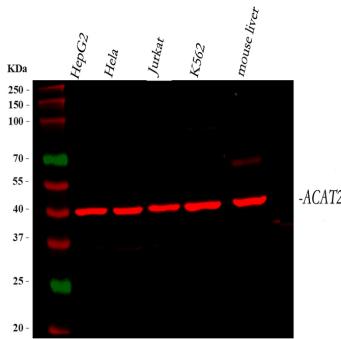
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Acetyl-CoA acetyltransferase, cytosolic, also known as cytosolic acetoacetyl-CoA thiolase, is an enzyme that in humans is encoded by the ACAT2 (acetyl-Coenzyme A acetyltransferase 2) gene. The product of this gene is an enzyme involved in lipid metabolism, and it encodes cytosolic acetoacetyl-CoA thiolase. This gene shows complementary overlapping with the 3-prime region of the TCP1 gene in both mouse and human. These genes are encoded on opposite strands of DNA, as well as in opposite transcriptional orientation. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

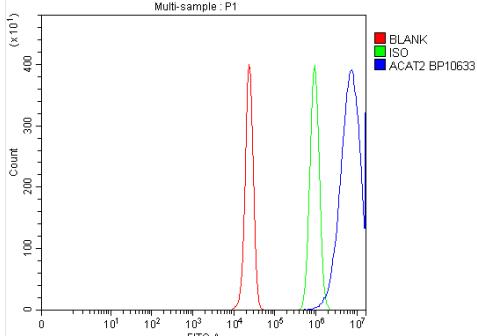
Selected Validation Data



Western blot analysis of ACAT2 using anti-ACAT2 antibody (A03245-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,
Lane 2: human Hela whole cell lysates,
Lane 3: human Jurkat whole cell lysates,
Lane 4: human K562 whole cell lysates,
Lane 5: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ACAT2 antigen affinity purified polyclonal antibody (A03245-1) at a dilution of 1:1000 and probed with a Fluoro 647 Conjugated AffiniPure Goat Anti-rabbit IgG (H+L) secondary antibody (Catalog # BA1150). A specific band was detected for ACAT2 at approximately 41 kDa. The expected band size for ACAT2 is at 41 kDa.



Flow Cytometry analysis of HepG2 cells using anti-ACAT2 antibody (A03245-1).

Overlay histogram showing HepG2 cells stained with A03245-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ACAT2 Antibody (A03245-1) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.