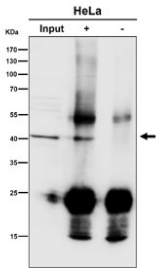
ACAT1 Antibody / Acetyl-CoA acetyltransferase [clone 29A55] (RQ8786)

Catalog No.	Formulation	Size
RQ8786	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

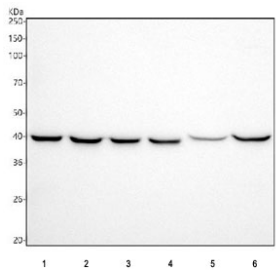
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	29A55
Purity	Affinity chromatography
UniProt	P24752
Applications	Western blot: 1:500-1:2000 Immunoprecipitation: 1:50
Limitations	This ACAT1 antibody is available for research use only.



Immunoprecipitation of ACAT1 protein from 500ug of human K562 whole cell lysate with ACAT1 antibody at 1:50. Western blot testing was done at 1:1000.



Western blot testing of 1) human HepG2, 2) human Caco-2, 3) human PC-3, 4) human K562, 5) rat lung and 6) rat liver tissue lysate with ACAT1 antibody. Predicted molecular weight ~45 kDa.

Description

The Acetyl-CoA acetyltransferase protein, also called ACAT1, is an enzyme that catalyzes the conversion of Acetyl-CoA to acetoacetyl-CoA. This reaction is a key step in the fatty acid beta-oxidation pathway, which is essential for the breakdown of fatty acids and the production of energy. Additionally, ACAT1 plays a critical role in ketogenesis, a process that occurs during times of fasting or low carbohydrate intake. The structure of the Acetyl-CoA acetyltransferase protein is highly conserved among different species, indicating its importance in cellular metabolism. This enzyme contains an active site where the catalytic reaction takes place, as well as binding sites for its substrate and cofactors. The precise mechanism by which Acetyl-CoA is converted to acetoacetyl-CoA by this enzyme involves a series of chemical reactions that involve the transfer of acetyl groups.

Application Notes

Optimal dilution of the ACAT1 antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Acetyl-CoA acetyltransferase protein was used as the immunogen for the ACAT1 Antibody.

Storage

Store the ACAT1 antibody at -20oC.

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