

Product datasheet for TA501222AM

OriGene Technologies, Inc.

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ACAT2 Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI3E2]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI3E2

Applications: FC, IF, IHC, WB

Recommended Dilution: WB 1:1000~2000, IHC 1:50, IF 1:100, FLOW 1:100

Reactivity: Human, Dog, Rat, Monkey, Mouse

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human ACAT2(NP_005882) produced in HEK293T

cell

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 0.5 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Biotin

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 41.2 kDa

Gene Name: acetyl-CoA acetyltransferase 2

Database Link: NP 005882

Entrez Gene 308100 RatEntrez Gene 484063 DogEntrez Gene 100427660 MonkeyEntrez Gene

39 Human Q9BWD1

Background: 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.





Synonyms: acetoacetyl Coenzyme A thiolase; acetyl-Coenzyme A acetyltransferase 2; cytosolic

acetoacetyl-CoA thiolase; OTTHUMP00000017527

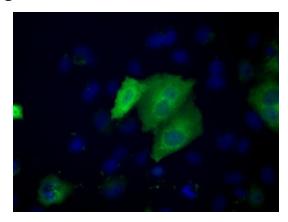
Protein Families: Druggable Genome

Protein Pathways: Butanoate metabolism, Fatty acid metabolism, Lysine degradation, Metabolic pathways,

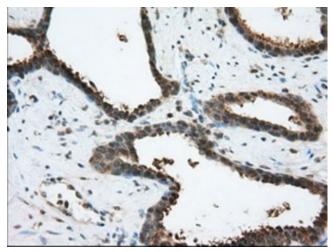
Propanoate metabolism, Pyruvate metabolism, Synthesis and degradation of ketone bodies, Terpenoid backbone biosynthesis, Tryptophan metabolism, Valine, leucine and isoleucine

degradation

Product images:

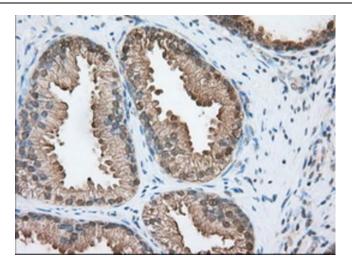


Anti-ACAT2 mouse monoclonal antibody ([TA501222]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ACAT2 ([RC201821]).

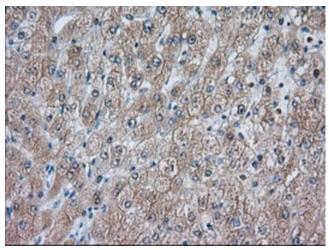


Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501222], Dilution 1:50)

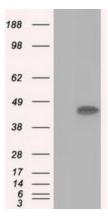




Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501222], Dilution 1:50)

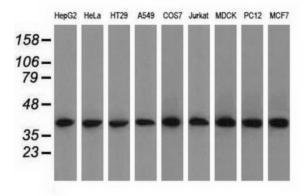


Immunohistochemical staining of paraffinembedded Human liver tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501222], Dilution 1:50)

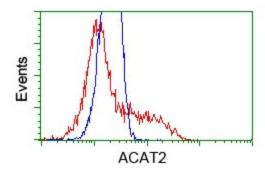


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ACAT2 ([RC201821], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACAT2. Positive lysates [LY417006] (100ug) and [LC417006] (20ug) can be purchased separately from OriGene.

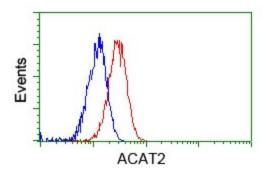




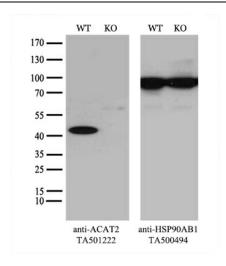
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ACAT2 monoclonal antibody.



HEK293T cells transfected with either [RC201821] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-ACAT2 antibody ([TA501222]), and then analyzed by flow cytometry.



Flow cytometric Analysis of Jurkat cells, using anti-ACAT2 antibody ([TA501222]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).



Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and ACAT2-Knockout HeLa cells (KO, Cat# [LC832703]) were separated by SDS-PAGE and immunoblotted with anti-ACAT2 monoclonal antibody [TA501222] (1:1000`). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.