

Product datasheet for **CF501223**

ACAT2 Mouse Monoclonal Antibody [Clone ID: OTI3C9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI3C9
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB 1:1000~2000, IHC 1:50, IF 1:100, FLOW 1:100
Reactivity:	Human, Dog, Rat, Mouse
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human ACAT2(NP_005882) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
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 39 Human Q9BWD1



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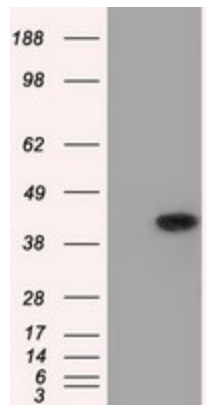
Background: The product of this gene is an enzyme involved in lipid metabolism, and it encodes cytosolic acetoacetyl-CoA thiolase. This gene shows complementary overlapping with the 3-prime region of the TCP1 gene in both mouse and human. These genes are encoded on opposite strands of DNA, as well as in opposite transcriptional orientation.

Synonyms: acetoacetyl Coenzyme A thiolase; acetyl-Coenzyme A acetyltransferase 2; cytosolic acetoacetyl-CoA thiolase; OTTHUMP00000017527

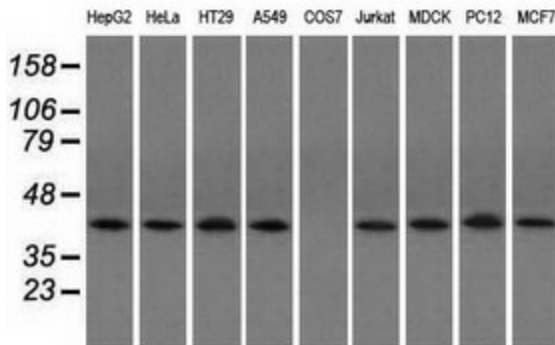
Protein Families: Druggable Genome

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

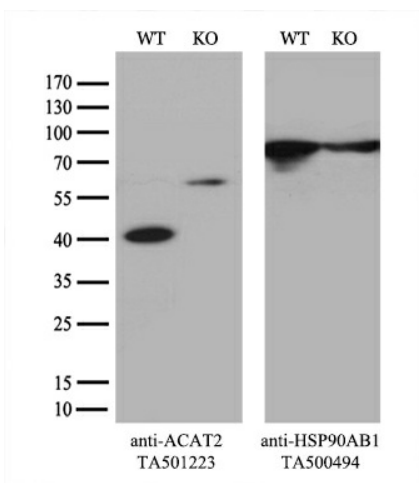
Product images:



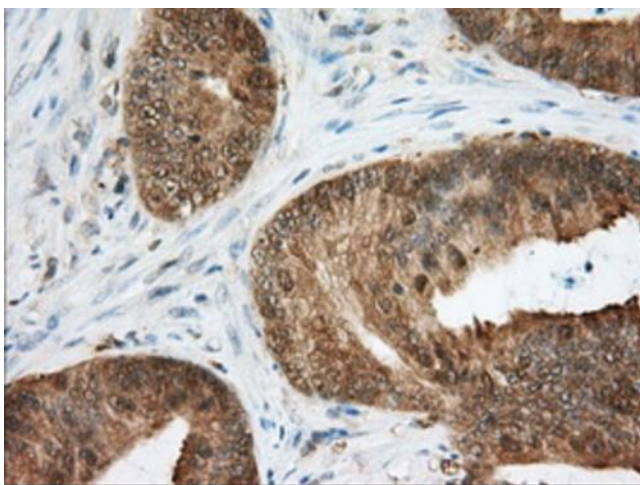
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ACAT2 ([RC201821], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACAT2. Positive lysates [LY417006] (100ug) and [LC417006]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



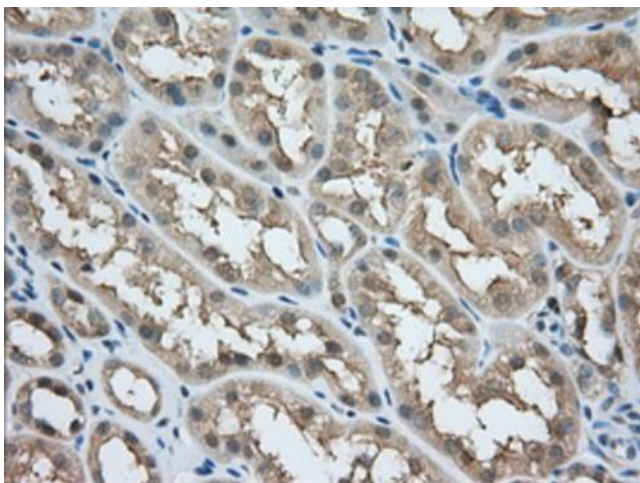
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ACAT2 monoclonal antibody.



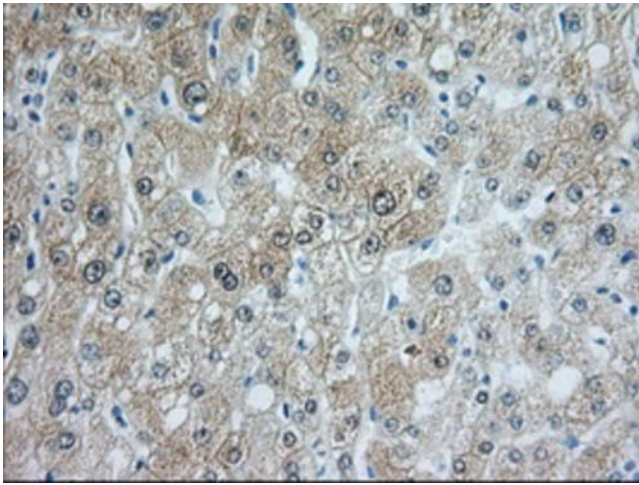
Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and ACAT2-Knockout HeLa cells (KO, Cat# [LC832703]) were separated by SDS-PAGE and immunoblotted with anti-ACAT2 monoclonal antibody [TA501223] (1:1000 `). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.



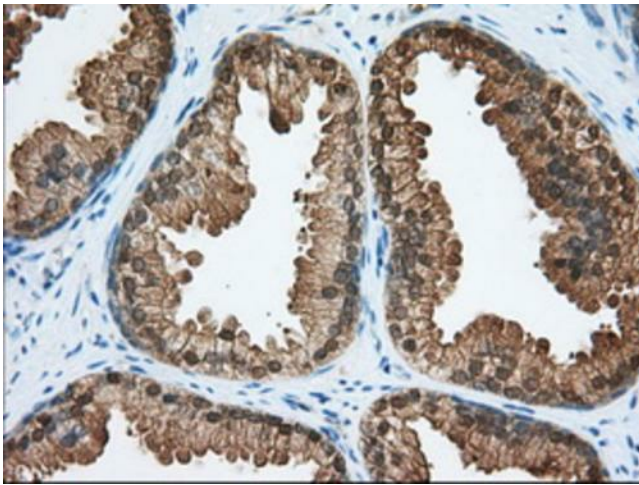
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-ACAT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



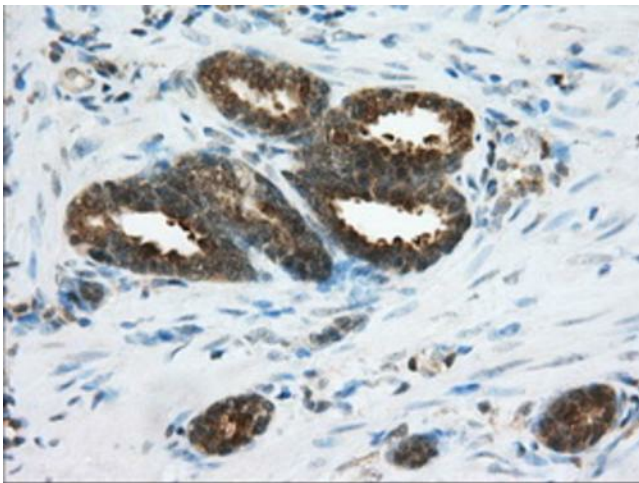
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



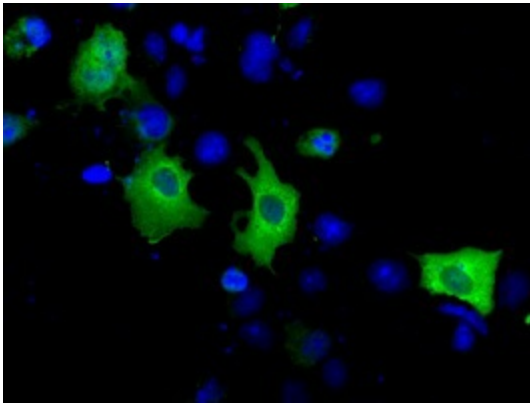
Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



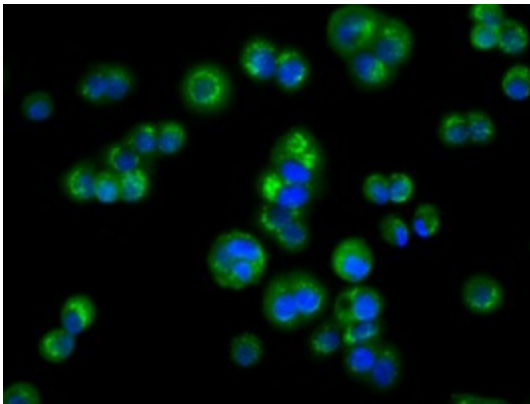
Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



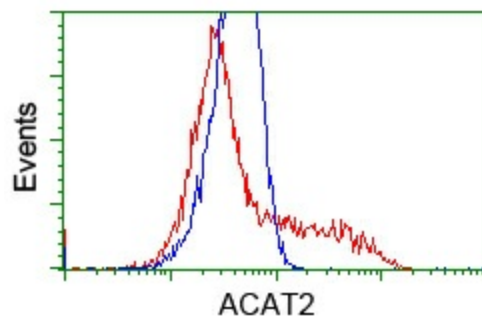
Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-ACAT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-ACAT2 mouse monoclonal antibody ([TA501223]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ACAT2 ([RC201821]).



Immunofluorescent staining of HT29 cells using anti-ACAT2 mouse monoclonal antibody ([TA501223]).



HEK293T cells transfected with either [RC201821] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-ACAT2 antibody ([TA501223]), and then analyzed by flow cytometry.