

## **Product datasheet for TA501223**

### OriGene Technologies, Inc.

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

**Concentration:** 0.96 mg/ml

**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

O9BWD1

**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.



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

acetoacetyl-CoA thiolase; OTTHUMP00000017527

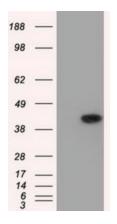
**Protein Families:** Druggable Genome

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

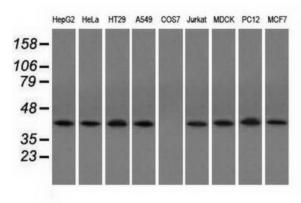
Propanoate metabolism, Pyruvate metabolism, Synthesis and degradation of ketone bodies, Terpenoid backbone biosynthesis, Tryptophan metabolism, Valine, leucine and isoleucine

degradation

# **Product images:**

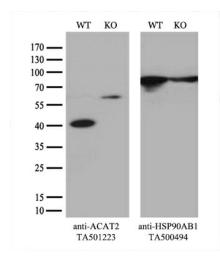


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ACAT2 ([RC201821], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACAT2. Positive lysates [LY417006] (100ug) and [LC417006]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

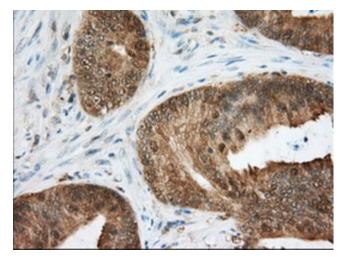


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ACAT2 monoclonal antibody.

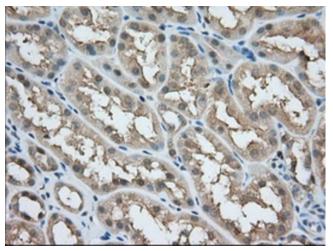




Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and ACAT2-Knockout HeLa cells (KO, Cat# [LC832703] ) were separated by SDS-PAGE and immunoblotted with anti-ACAT2 monoclonal antibody TA501223 (1:1000`). Then the blotted membrane was stripped and reprobed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

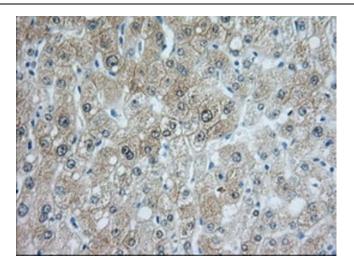


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-ACAT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

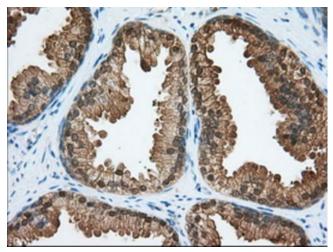


Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

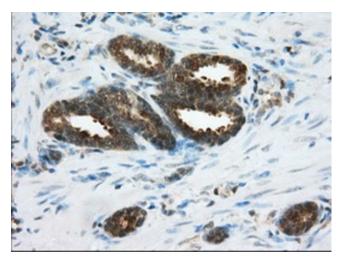




Immunohistochemical staining of paraffinembedded Human liver tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

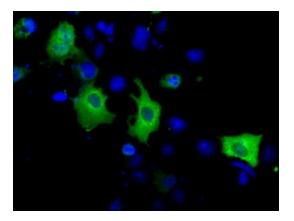


Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

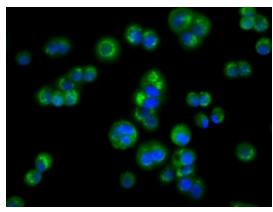


Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-ACAT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

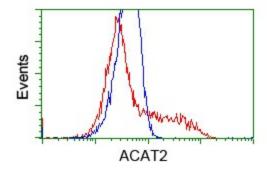




Anti-ACAT2 mouse monoclonal antibody (TA501223) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ACAT2 ([RC201821]).



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.