

## OriGene Technologies, Inc.

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## **Product datasheet for TA501219**

## **ACAT2 Mouse Monoclonal Antibody [Clone ID: OTI5F7]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: OTI5F7

**Applications:** FC, IF, IHC, WB

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

Reactivity: Human, Rat, Dog

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: 1 mg/ml

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

(protein A/G)

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

**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,

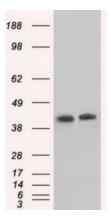
Propanoate metabolism, Pyruvate metabolism, Synthesis and degradation of ketone bodies, Terpenoid backbone biosynthesis, Tryptophan metabolism, Valine, leucine and isoleucine

degradation

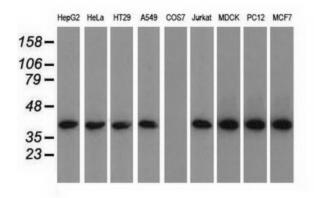




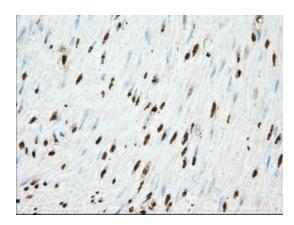
## **Product images:**



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.

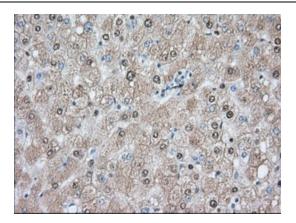


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ACAT2 monoclonal antibody.

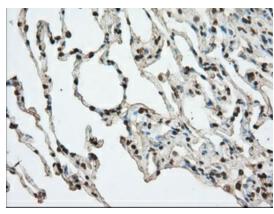


Immunohistochemical staining of paraffinembedded Human colon tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501219, Dilution 1:50)

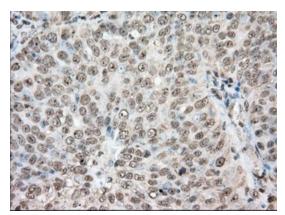




Immunohistochemical staining of paraffinembedded Human liver tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501219, Dilution 1:50)

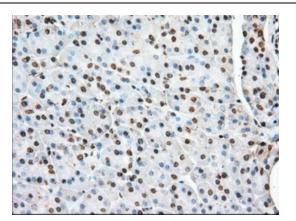


Immunohistochemical staining of paraffinembedded Human lung tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501219, Dilution 1:50)

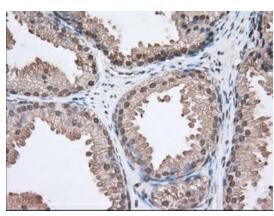


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501219, Dilution 1:50)

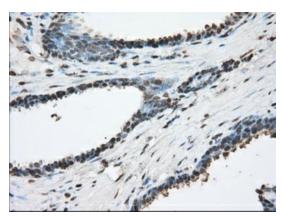




Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501219, Dilution 1:50)

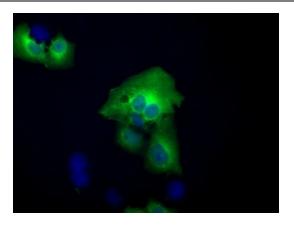


Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501219, Dilution 1:50)

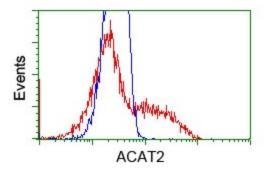


Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501219, Dilution 1:50)

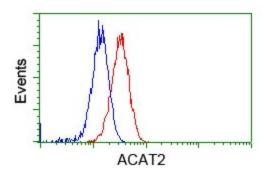




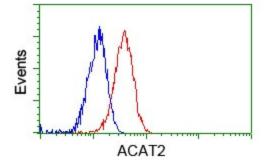
Anti-ACAT2 mouse monoclonal antibody (TA501219) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ACAT2 ([RC201821]).



HEK293T cells transfected with either [RC201821] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-ACAT2 antibody (TA501219), and then analyzed by flow cytometry.



Flow cytometric Analysis of Hela cells, using anti-ACAT2 antibody (TA501219), (Red), compared to a nonspecific negative control antibody ([TA50011]), (Blue).



Flow cytometric Analysis of Jurkat cells, using anti-ACAT2 antibody (TA501219), (Red), compared to a nonspecific negative control antibody ([TA50011]), (Blue).