

## Product datasheet for **CF501220**

### ACAT2 Mouse Monoclonal Antibody [Clone ID: OTI1G6]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1G6
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB 1:1000~2000, IHC 1:50, IF 1:100, FLOW 1:100
Reactivity:	Human, Monkey, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
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:	<a href="#">NP_005882</a> <a href="#">Entrez Gene 308100 Rat</a> <a href="#">Entrez Gene 100427660 Monkey</a> <a href="#">Entrez Gene 39 Human</a> <a href="#">Q9BWD1</a>



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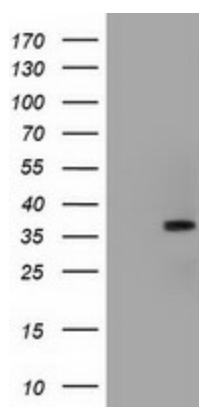
**Background:** The product of this gene is an enzyme involved in lipid metabolism, and it encodes cytosolic acetoacetyl-CoA thiolase. This gene shows complementary overlapping with the 3-prime region of the TCP1 gene in both mouse and human. These genes are encoded on opposite strands of DNA, as well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

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

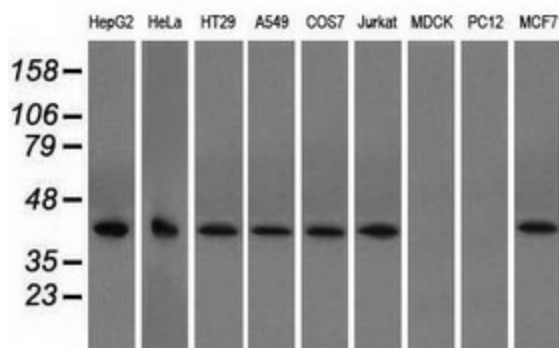
**Protein Families:** Druggable Genome

**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

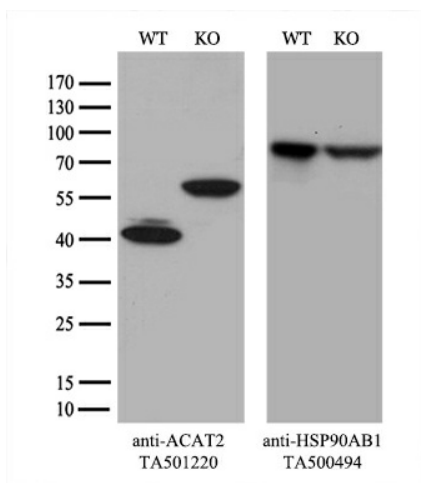
**Product images:**



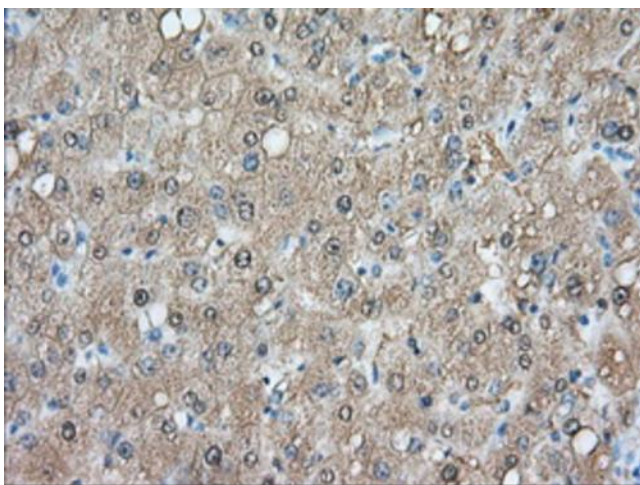
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ACAT2 ([RC201821], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACAT2. Positive lysates [LY417006] (100ug) and [LC417006]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



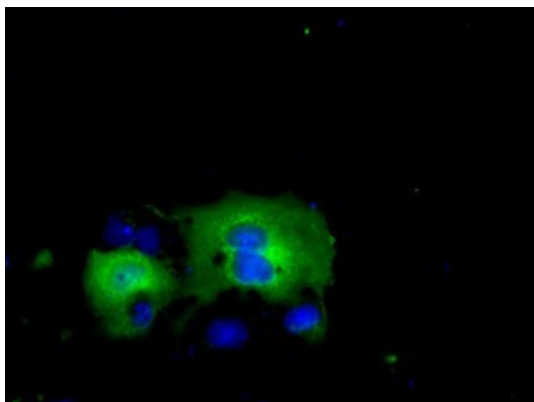
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ACAT2 monoclonal antibody.



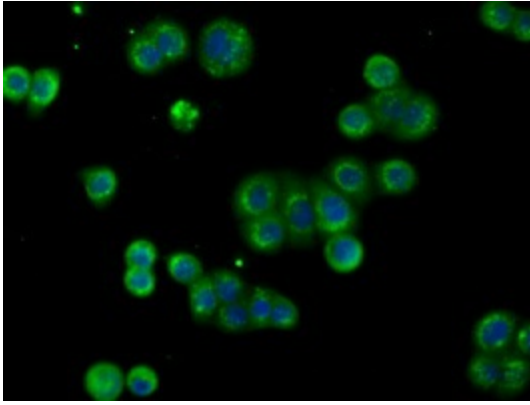
Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and ACAT2-Knockout HeLa cells (KO, Cat# [LC832703]) were separated by SDS-PAGE and immunoblotted with anti-ACAT2 monoclonal antibody [TA501220] (1:1000). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.



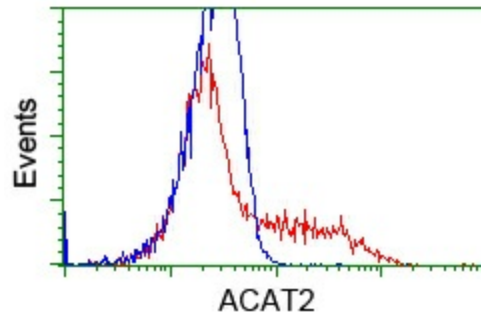
Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-ACAT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501220], Dilution 1:50)



Anti-ACAT2 mouse monoclonal antibody ([TA501220]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ACAT2 ([RC201821]).



Immunofluorescent staining of HT29 cells using anti-ACAT2 mouse monoclonal antibody (TA501220).



HEK293T cells transfected with either [RC201821] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-ACAT2 antibody (TA501220), and then analyzed by flow cytometry.