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# Product datasheet for CF501216

## ACAT2 Mouse Monoclonal Antibody [Clone ID: OTI1C5]

### Product data:

| | |
|---|---|
| **Product Type:** | Primary Antibodies |
| **Clone Name:** | OTI1C5 |
| **Applications:** | FC, IF, WB |
| **Recommended Dilution:** | WB 1:500~2000, 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_0058826) 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<br>Entrez Gene 308100 RatEntrez Gene 484063 DogEntrez Gene 100427660 MonkeyEntrez Gene 39 Human<br>Q9BWD1 |

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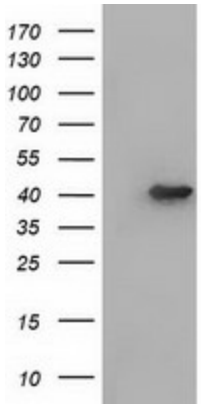
**Background:** The product of this gene is an enzyme involved in lipid metabolism, and it encodes cytosolic acetoacetyl-CoA thiolase. This gene shows complementary overlapping with the 3-prime region of the TCP1 gene in both mouse and human. These genes are encoded on opposite strands of DNA, as well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

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

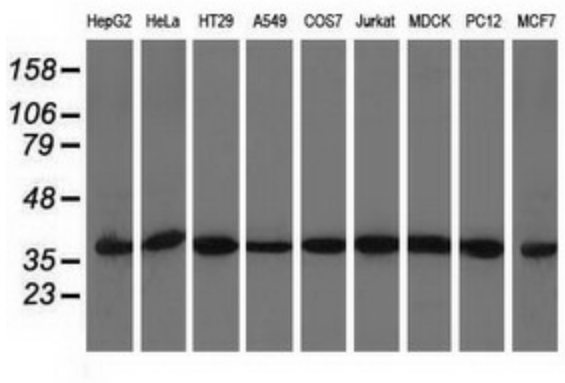
**Protein Families:** Druggable Genome

**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

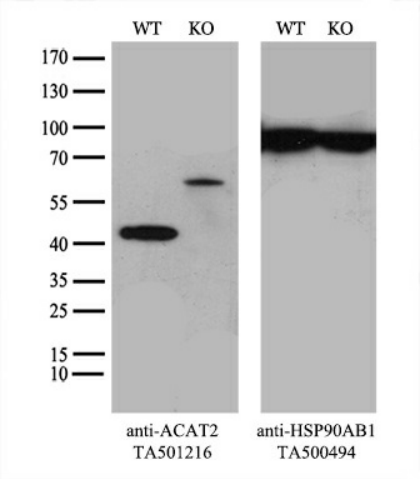
## Product images:



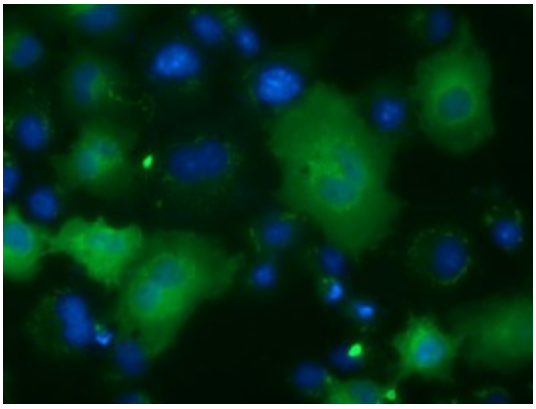

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ACAT2 ([RC201821], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACAT2. Positive lysates [LY417006] (100ug) and [LC417006]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



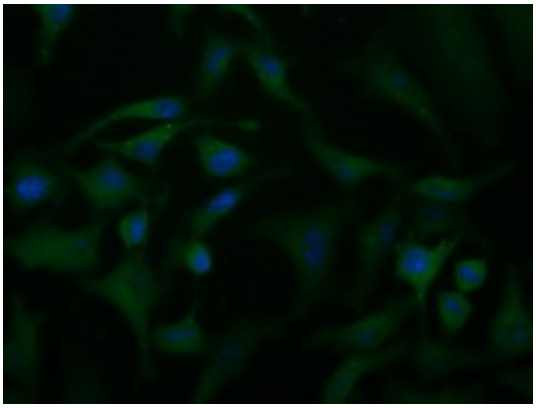

Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ACAT2 monoclonal antibody.



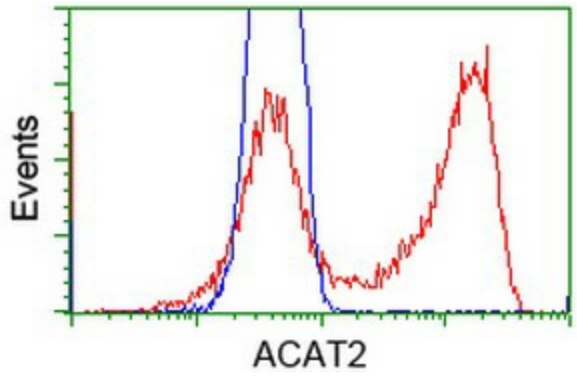

Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and ACAT2-Knockout HeLa cells (KO, Cat# [LC832703]) were separated by SDS-PAGE and immunoblotted with anti-ACAT2 monoclonal antibody [TA501216] (1:1000`). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.



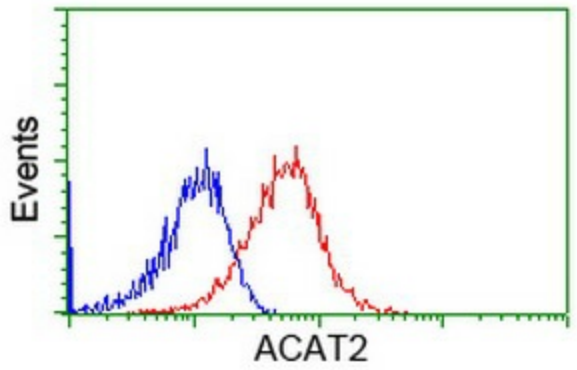
Anti-ACAT2 mouse monoclonal antibody ([TA501216]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ACAT2 ([RC201821]).



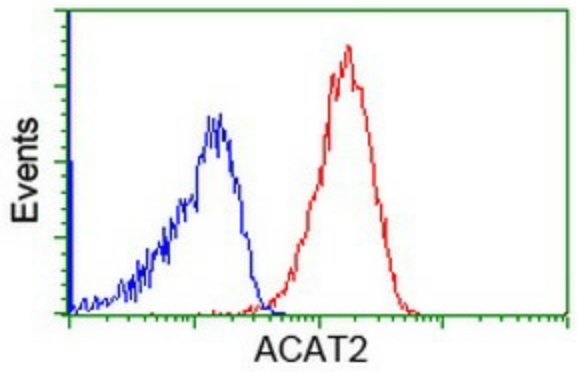
Immunofluorescent staining of HeLa cells using anti-ACAT2 mouse monoclonal antibody ([TA501216]).




HEK293T cells transfected with either [RC201821] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-ACAT2 antibody ([TA501216]), and then analyzed by flow cytometry.




Flow cytometric Analysis of Hela cells, using anti-ACAT2 antibody ([TA501216]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).




Flow cytometric Analysis of Jurkat cells, using anti-ACAT2 antibody ([TA501216]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).