

Product Name: KD-Validated ATP Citrate Lyase Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb00249

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 120.8kDa

Antigen Information

Gene Name	ACLY
Alternative Names	ACLY; ATP Citrate Lyase; ACL; ATPCL; CLATP; ATP-Citrate (Pro-S-)-Lyase; Citrate Cleavage Enzyme; ATP-Citrate Synthase; EC 2.3.3.8; ATP Citrate Synthase
Gene ID	47.0
SwissProt ID	P53396
Immunogen	A synthesized peptide derived from human ATP citrate lyase

Background

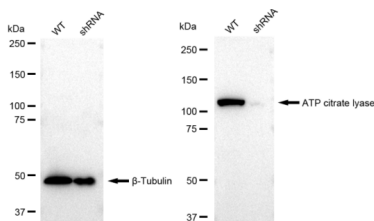
ATP citrate lyase is the primary enzyme responsible for the synthesis of cytosolic acetyl-CoA in many tissues. The enzyme is a tetramer (relative molecular weight approximately 440,000) of apparently identical subunits. It catalyzes the formation of acetyl-CoA and oxaloacetate from citrate and CoA with a concomitant hydrolysis of ATP to ADP and phosphate. The product,

acetyl-CoA, serves several important biosynthetic pathways, including lipogenesis and cholesterologenesis. In nervous tissue, ATP citrate-lyase may be involved in the biosynthesis of acetylcholine. Multiple transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Dec 2014]

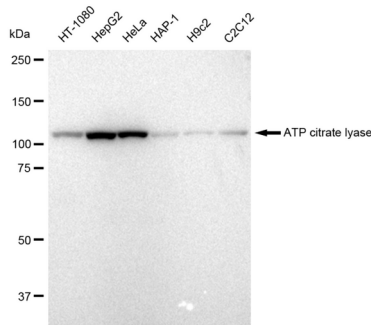
Research Area

Signal Transduction,Cancer,Metabolism

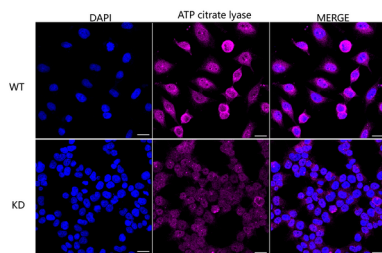
Image Data



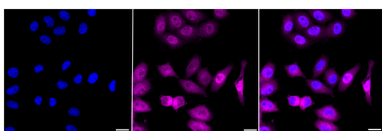
Western blotting analysis using ATP citrate lyase antibody (KVA00249). ATP citrate lyase expression in wild type (WT) and ATP citrate lyase shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with ATP citrate lyase antibody (KVA00249, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



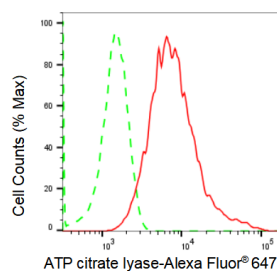
Western blotting analysis using ATP citrate lyase antibody (KVA00249). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ATP citrate lyase antibody (KVA00249, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using ATP citrate lyase antibody (KVA00249, 1:1,000). Top panel: wild-type (WT); Bottom panel: ATP citrate lyase shRNA knockdown (KD). Nuclei were stained blue with DAPI; ATP citrate lyase was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with ATP citrate lyase antibody (KVA00249, 1:1,000). Nuclei were stained blue with DAPI; ATP citrate lyase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20 µm.



Flow cytometric analysis of ATP citrate lyase expression in HepG2 cells using ATP citrate lyase antibody (KVA00249, 1:2,000). Green, isotype control; red, ATP citrate lyase.