

ACLY Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1784a**Specification****ACLY Antibody - Product Information**

Application	E, WB, IF, FC, IHC
Primary Accession	P53396
Reactivity	Human, Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	125kDa KDa

Description

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 cholesterol synthesis. In nervous tissue, ATP citrate-lyase may be involved in the biosynthesis of acetylcholine. Two transcript variants encoding distinct isoforms have been identified for this gene.

Immunogen

Purified recombinant fragment of human ACLY (AA: 306-502) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

ACLY Antibody - Additional Information**Gene ID 47****Other Names**

ATP-citrate synthase, 2.3.3.8, ATP-citrate (pro-S-)-lyase, ACL, Citrate cleavage enzyme, ACLY

Dilution

E~~1/10000
WB~~1/500 - 1/2000
IF~~1/50
FC~~1/200 - 1/400
IHC~~1/200 - 1/1000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ACLY Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ACLY Antibody - Protein Information

Name ACLY

Function

Catalyzes the cleavage of citrate into oxaloacetate and acetyl-CoA, the latter serving as common substrate for de novo cholesterol and fatty acid synthesis.

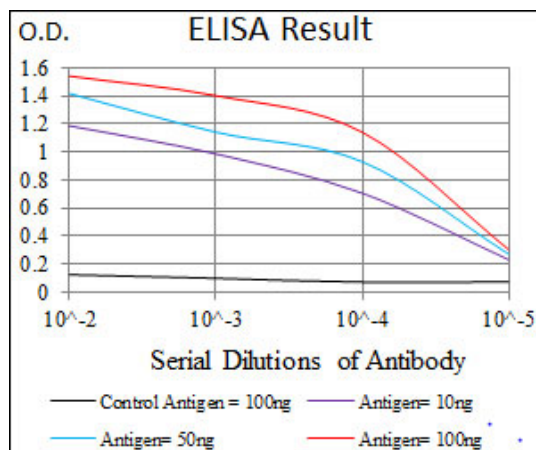
Cellular Location

Cytoplasm, cytosol.

ACLY Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



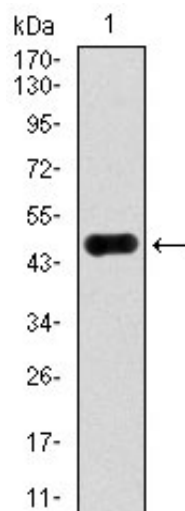


Figure 1: Western blot analysis using ACLY mAb against human ACLY recombinant protein. (Expected MW is 46.7 kDa)

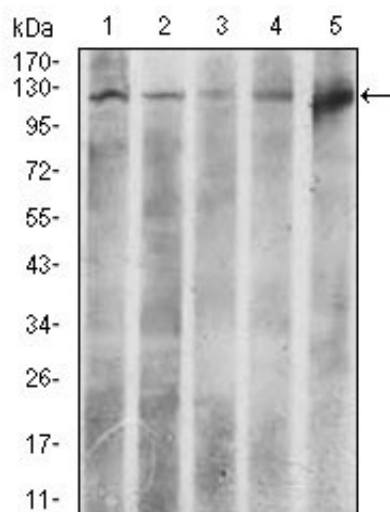


Figure 2: Western blot analysis using ACLY mouse mAb against HeLa (1), NIH3T3 (2), C6 (3), COS7 (4), and Raji (5) cell lysate.

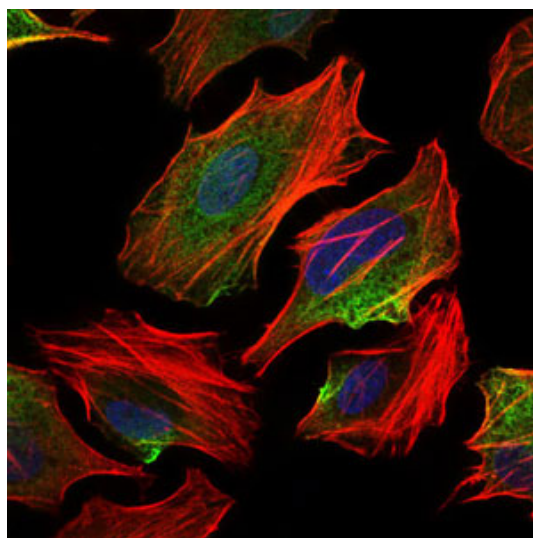


Figure 3: Immunofluorescence analysis of HeLa cells using ACLY mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

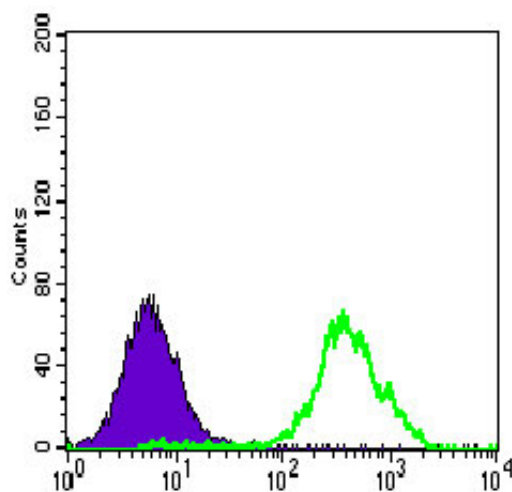


Figure 4: Flow cytometric analysis of HeLa cells using ACLY mouse mAb (green) and negative control (purple).

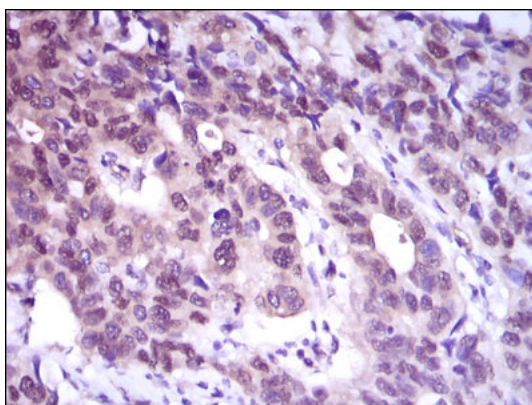


Figure 5: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using ACLY mouse mAb with DAB staining.

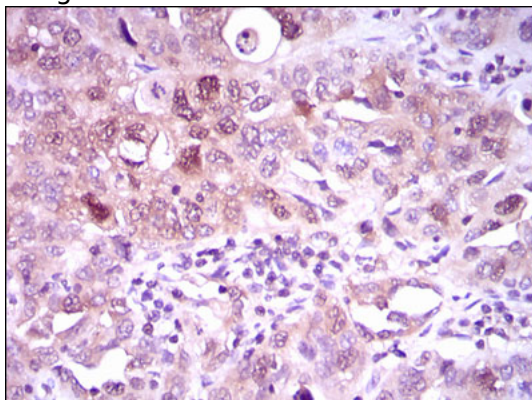


Figure 6: Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues using ACLY mouse mAb with DAB staining.

ACLY Antibody - References

1. J Biol Chem. 2010 Oct 15;285(42):32606-15. 2. Int J Cancer. 2010 May 15;126(10):2282-95.