

**ACLY Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1784a**

**Specification**

**ACLY Antibody - Product Information**

Application	<b>E, WB, IF, FC, IHC</b>
Primary Accession	<a href="#">P53396</a>
Reactivity	<b>Human, Mouse, Rat, Monkey</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>125kDa KDa</b>

**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.

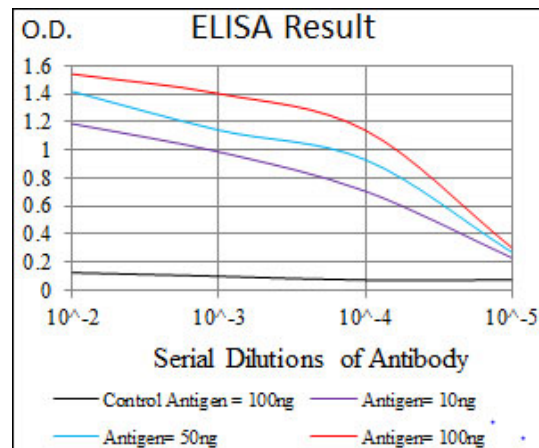
### Cellular Location

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](#)



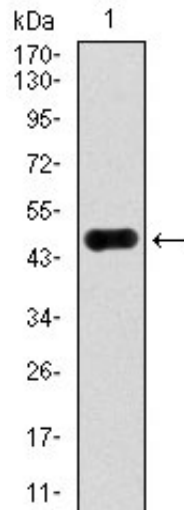


Figure 1: Western blot analysis using ACLY mAb against human ACLY recombinant protein. (Expected MW is 46.7 kDa)

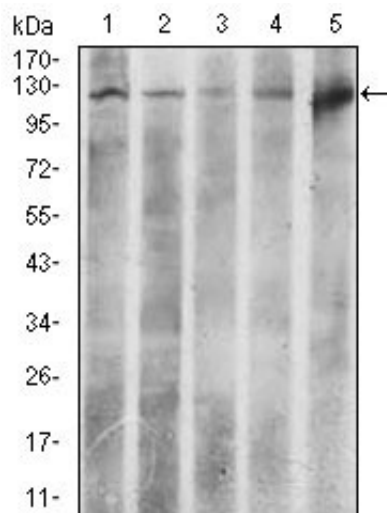


Figure 2: Western blot analysis using ACLY mouse mAb against HeLa (1), NIH3T3 (2), C6 (3), COS7 (4), and Raji (5) cell lysate.

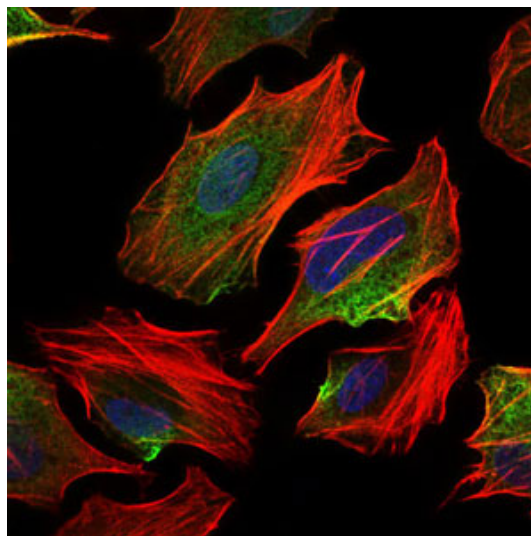


Figure 3: Immunofluorescence analysis of HeLa cells using ACLY mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

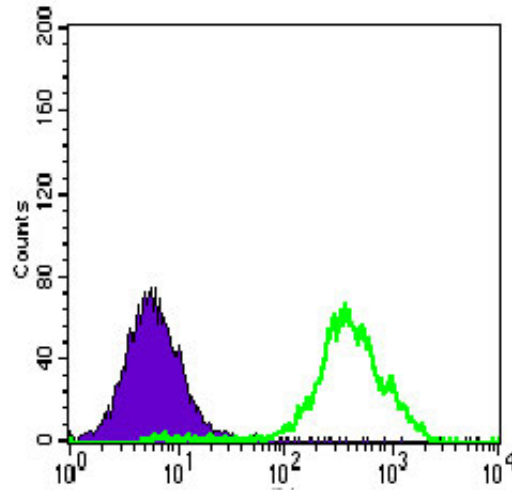


Figure 4: Flow cytometric analysis of HeLa cells using ACLY mouse mAb (green) and negative control (purple).

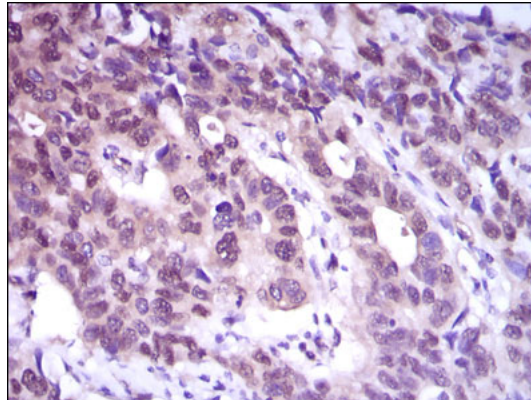


Figure 5: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using ACLY mouse mAb with DAB staining.

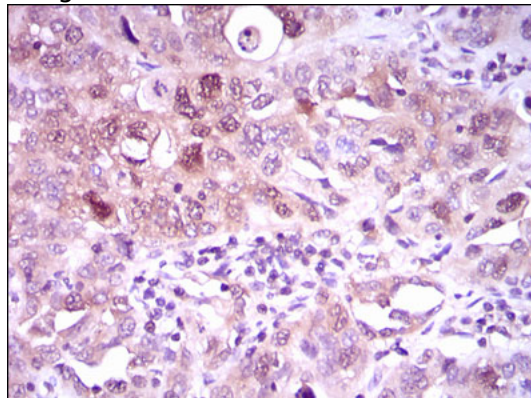


Figure 6: Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues using ACLY mouse mAb with DAB staining.

#### 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.