

## Product datasheet for **CF501031**

### ATP citrate lyase (ACLY) Mouse Monoclonal Antibody [Clone ID: OTI3G8]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI3G8
Applications:	IF, IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:50, IF 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human ACLY (NP_001087) 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:	120.8 kDa
Gene Name:	ATP citrate lyase
Database Link:	<a href="#">NP_001087</a> <a href="#">Entrez Gene 24159 Rat</a> <a href="#">Entrez Gene 104112 Mouse</a> <a href="#">Entrez Gene 47 Human</a> <a href="#">P53396</a>



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**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. Two transcript variants encoding distinct isoforms have been identified for this gene.

**Synonyms:**

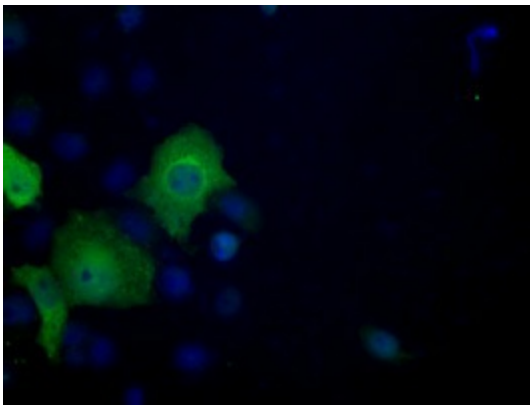
ACL; ATPCL; CLATP

**Protein Families:**

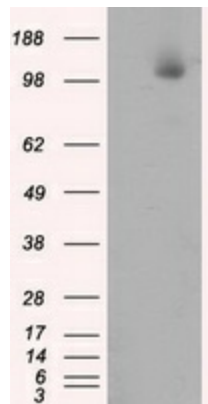
Druggable Genome

**Protein Pathways:**

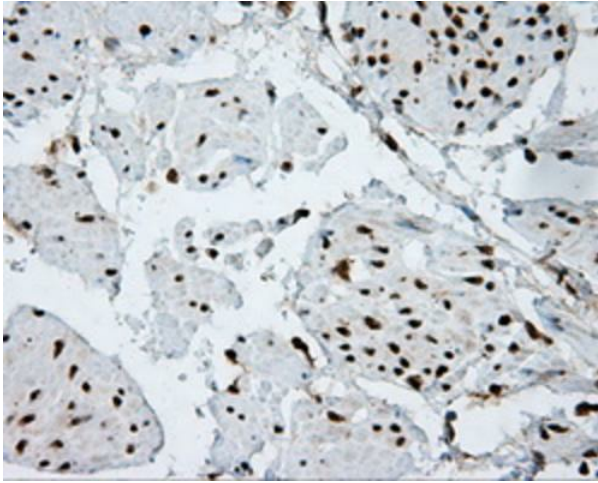
Citrate cycle (TCA cycle), Metabolic pathways

**Product images:**


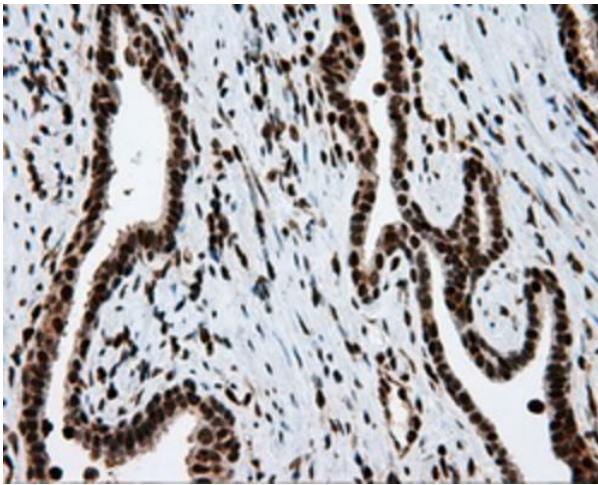
Anti-ACLY mouse monoclonal antibody ([TA501031]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ACLY ([RC200508]).



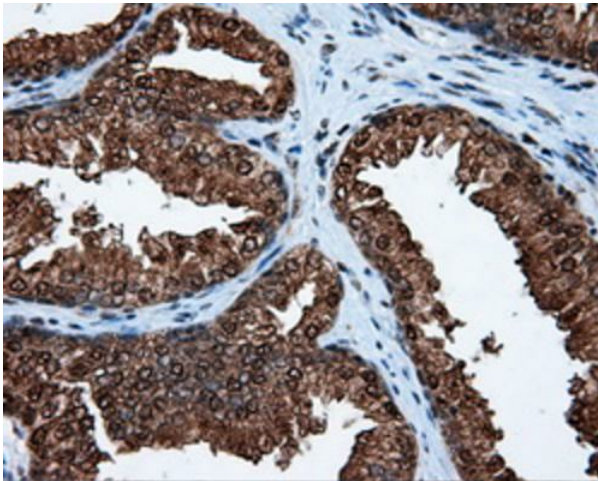
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ACLY (Cat# [RC200508], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACLY(Cat# [TA501031]). Positive lysates [LY420122] (100ug) and [LC420122] (20ug) can be purchased separately from OriGene.



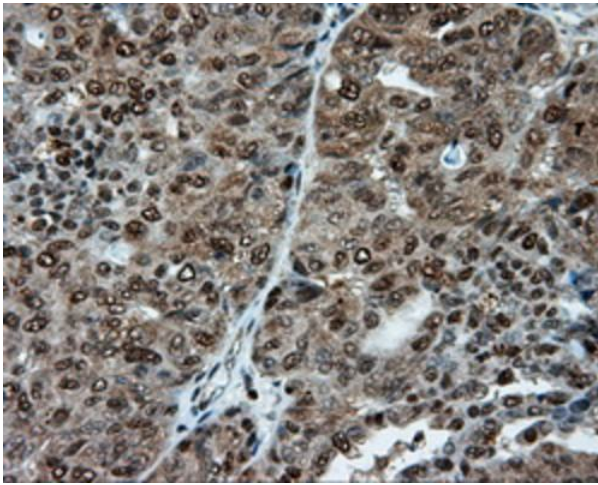
Immunohistochemical staining of paraffin-embedded bladder tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



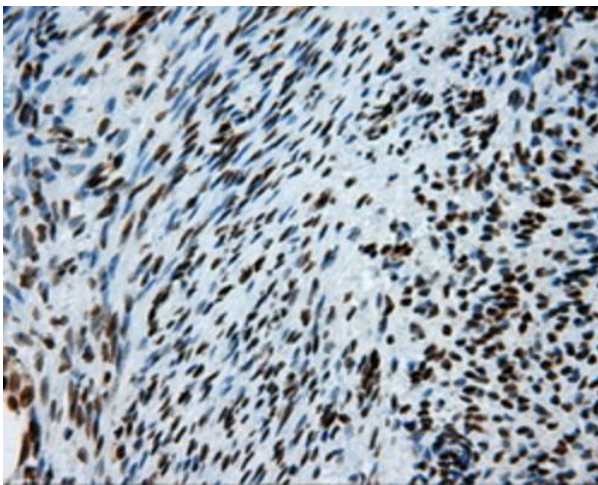
Immunohistochemical staining of paraffin-embedded Carcinoma of prostate tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



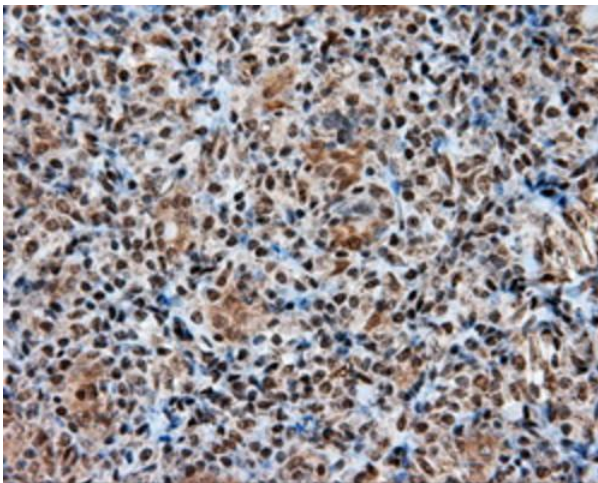
Immunohistochemical staining of paraffin-embedded prostate tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



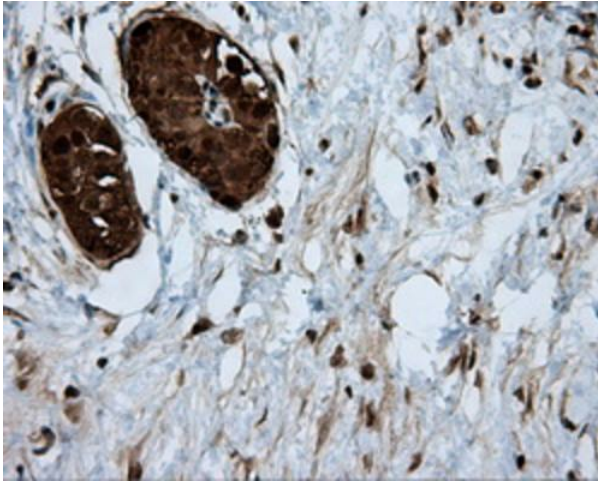
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of endometrium tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



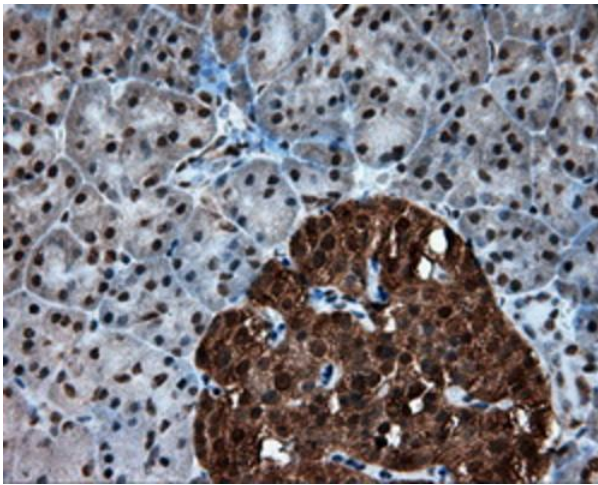
Immunohistochemical staining of paraffin-embedded endometrium tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



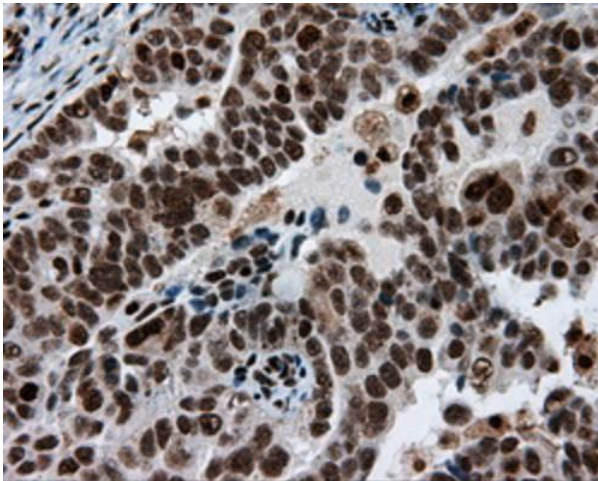
Immunohistochemical staining of paraffin-embedded Carcinoma of thyroid tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



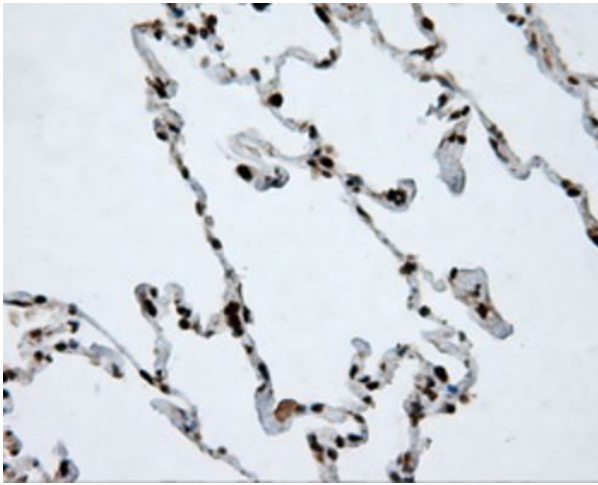
Immunohistochemical staining of paraffin-embedded Carcinoma of pancreas tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



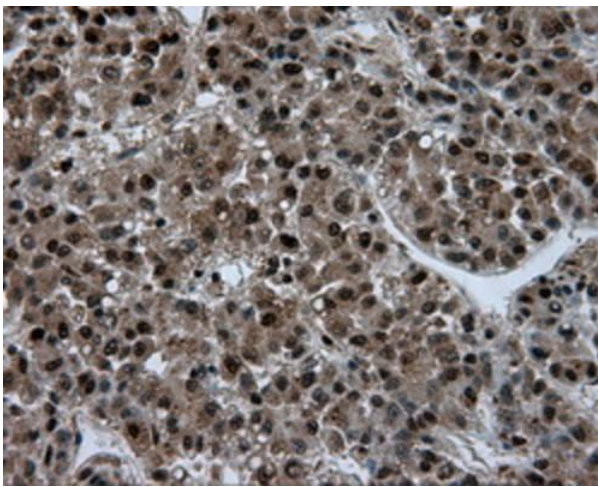
Immunohistochemical staining of paraffin-embedded pancreas tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



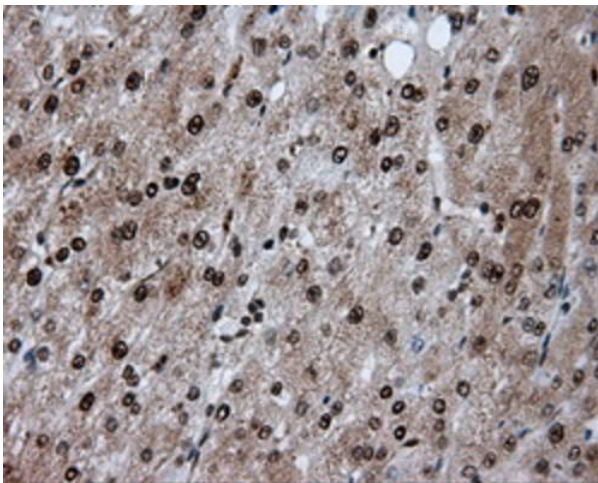
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of ovary tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



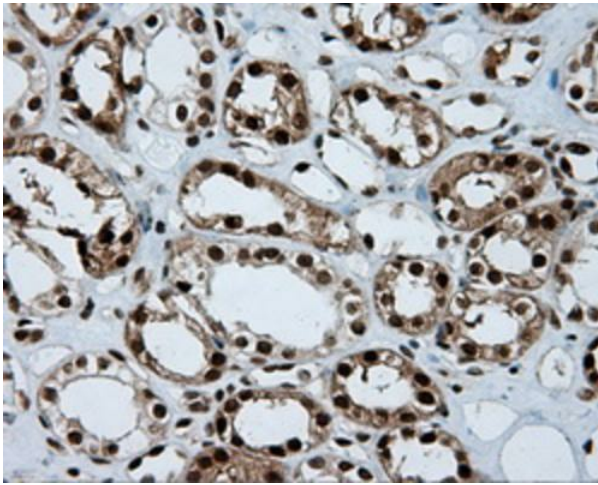
Immunohistochemical staining of paraffin-embedded lung tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



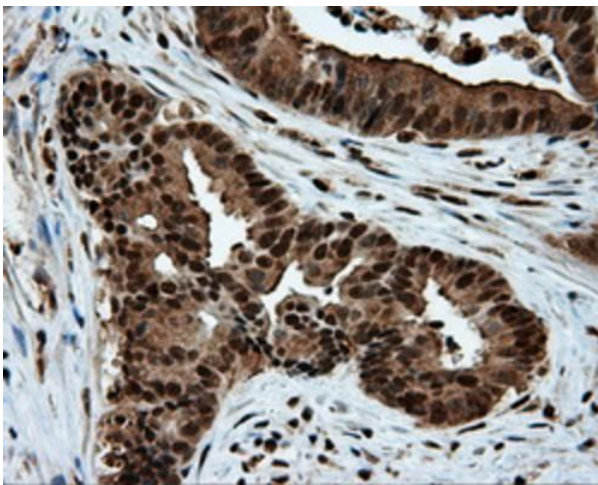
Immunohistochemical staining of paraffin-embedded Carcinoma of liver tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



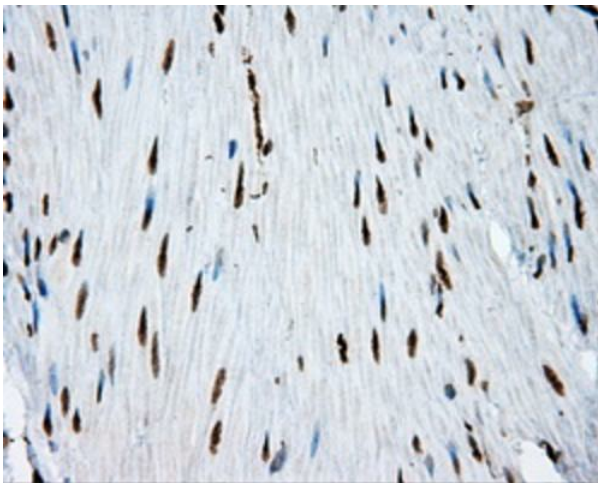
Immunohistochemical staining of paraffin-embedded liver tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



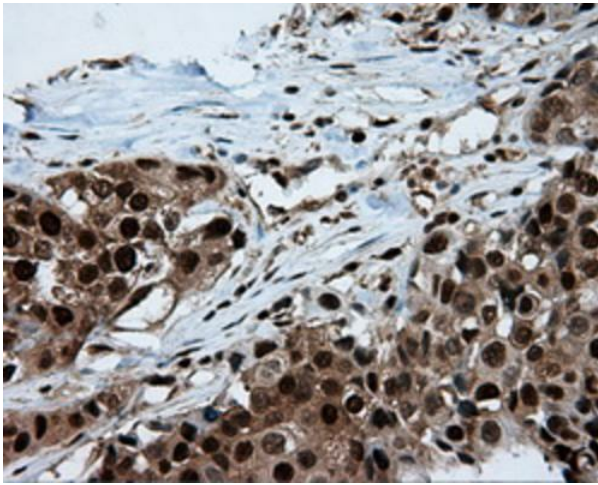
Immunohistochemical staining of paraffin-embedded Kidney tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



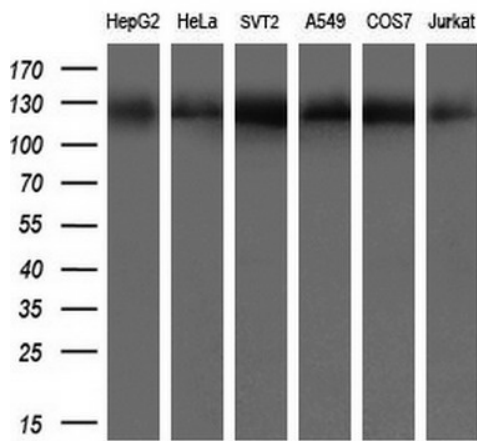
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of colon tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



Immunohistochemical staining of paraffin-embedded colon tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of breast tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501031], Dilution 1:50)



Western blot analysis of extracts (10ug) from 6 different cell lines by using anti-ACLY monoclonal antibody (1:200).