

## OriGene Technologies, Inc.

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## **Product datasheet for TA501031**

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

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: OTI3G8

**Applications:** IF, IHC, WB

Recommend Dilution: WB 1:2000, IHC 1:50, IF 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human ACLY (NP\_001087) produced in HEK293T

cell

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.58 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 120.8 kDa

**Gene Name:** ATP citrate lyase

Database Link: NP 001087 Entrez Gene 47 Human

**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 cholesterogenesis. 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

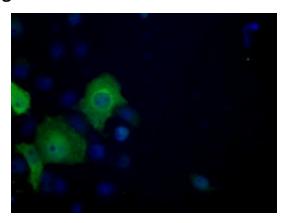
Protein Families: Druggable Genome

**Protein Pathways:** Citrate cycle (TCA cycle), Metabolic pathways

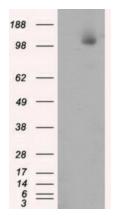




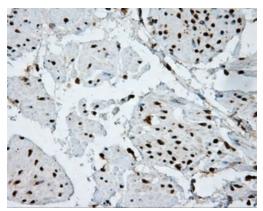
## **Product images:**



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

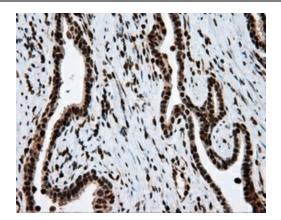


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ACLY ([RC200508], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACLY. Positive lysates [LY420122] (100ug) and [LC420122]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

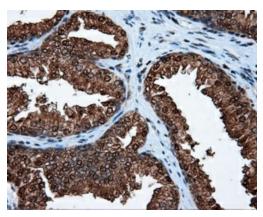


Immunohistochemical staining of paraffinembedded bladder tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)

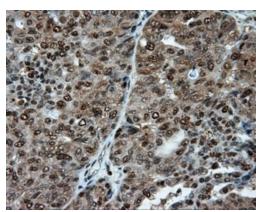




Immunohistochemical staining of paraffinembedded Carcinoma of prostate tissue using anti-ACLY mouse monoclonal antibody. (Heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)

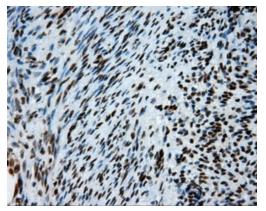


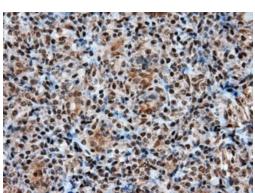
Immunohistochemical staining of paraffinembedded prostate tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)

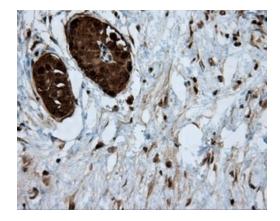


Immunohistochemical staining of paraffinembedded Adenocarcinoma of endometrium tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)







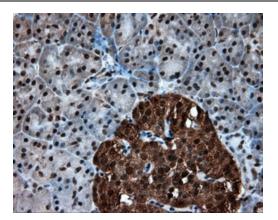


Immunohistochemical staining of paraffinembedded endometrium tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)

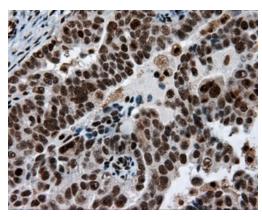
Immunohistochemical staining of paraffinembedded Carcinoma of thyroid tissue using anti-ACLY mouse monoclonal antibody. (Heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)

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





Immunohistochemical staining of paraffinembedded 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)

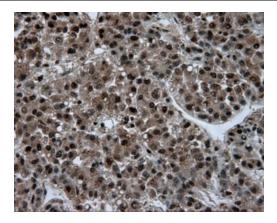


Immunohistochemical staining of paraffinembedded Adenocarcinoma of ovary tissue using anti-ACLY mouse monoclonal antibody. (Heatinduced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)

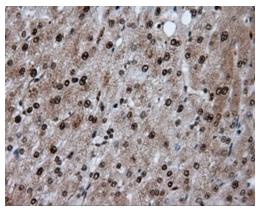


Immunohistochemical staining of paraffinembedded lung tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)

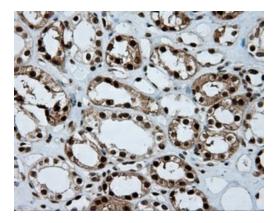




Immunohistochemical staining of paraffinembedded Carcinoma of liver tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)

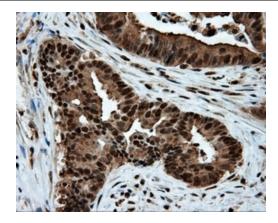


Immunohistochemical staining of paraffinembedded liver tissue within the normal limits using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)



Immunohistochemical staining of paraffinembedded 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)

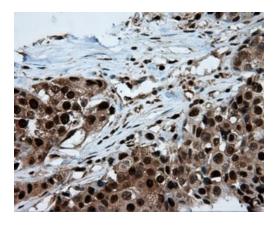




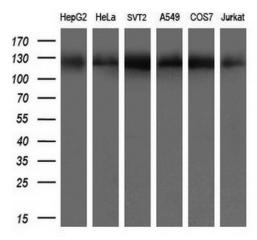
Immunohistochemical staining of paraffinembedded Adenocarcinoma of colon tissue using anti-ACLY mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501031, Dilution 1:50)



Immunohistochemical staining of paraffinembedded 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 paraffinembedded 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).