

For Research Use Only

# ACLY Polyclonal antibody

Catalog Number: 15421-1-AP

Featured Product

83 Publications



## Basic Information

### Catalog Number:

15421-1-AP

### Size:

150ul, Concentration: 450 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG7709

### GenBank Accession Number:

BC006195

### GeneID (NCBI):

47

### UNIPROT ID:

P53396

### Full Name:

ATP citrate lyase

### Calculated MW:

121 kDa

### Observed MW:

120 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:8000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:10-1:100

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, chicken

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB** : HeLa cells, A549 cells, L02 cells, Jurkat cells, K-562 cells, MCF-7 cells, mouse liver tissue, rat liver tissue

**IP** : HeLa cells,

**IHC** : human prostate cancer tissue,

**IF/ICC** : HepG2 cells,

## Background Information

ACLY(ATP-citrate synthase) is also named as ACL. It is the primary enzyme responsible for the synthesis of cytosolic acetyl-CoA. ACLY serves as not only a target in oxygenated cells for suppression of lipid synthesis and histone acetylation, but also as a susceptible target in hypoxic cells to restore inhibition of glycolysis. In nonsmall cell lung carcinoma and hepatocellular carcinoma, ACLY is overexpressed compared with normal parenchyma suggesting that ACLY may represent a common target among highly malignant tumors(PMID:19795461). This protein has 2 isoforms produced by alternative splicing.

## Notable Publications

Author	Pubmed ID	Journal	Application
Sophie Trefely	31767181	Mol Metab	WB
Xiaojing Liu	30245009	Cell	WB
G Li	27641336	Oncogene	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

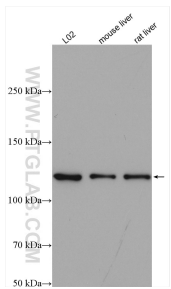
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

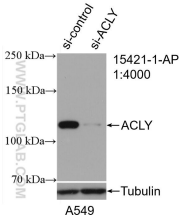
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

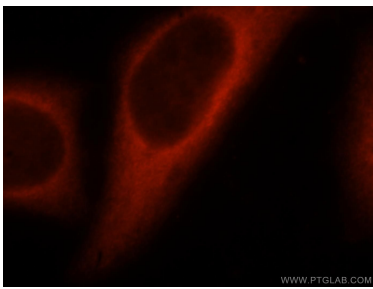
Selected Validation Data



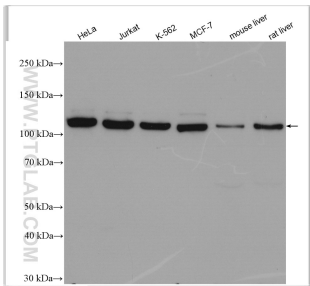
Various lysates were subjected to SDS PAGE followed by western blot with 15421-1-AP (ATP citrate lyase antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



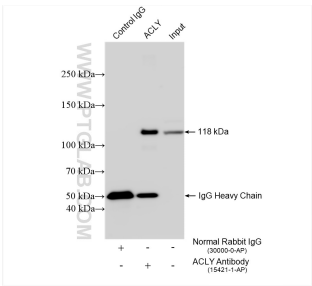
WB result of ACLY antibody (15421-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ACLY transfected A549 cells.



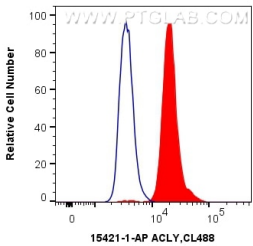
Immunofluorescent analysis of HepG2 cells, using ACLY antibody 15421-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



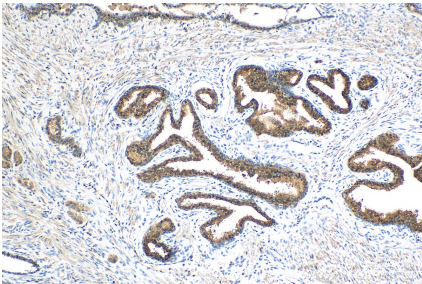
Various lysates were subjected to SDS PAGE followed by western blot with 15421-1-AP (ACLY antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



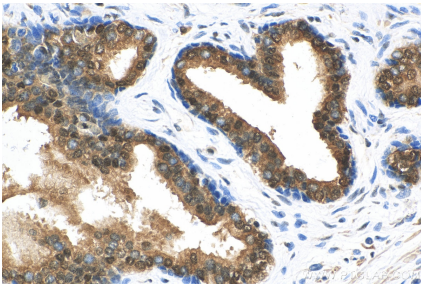
IP result of anti-ACLY (IP:15421-1-AP, 4ug; Detection:15421-1-AP 1:8000) with HeLa cells lysate 1320 ug.



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug Anti-Human ACLY (15421-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 15421-1-AP (ACLY antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 15421-1-AP (ACLY antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).