For Research Use Only

ACLY Polyclonal antibody

Catalog Number:15421-1-AP Featured Product 63 Publications

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Basic Information

Catalog Number:
15421-1-AP

Size:
150ul , Concentration: 450 μg/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 1:1000-1:4000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF 1:10-1:100

Applications

Tested Applications:
WB, IP, IF, FC, IHC, ELISA

Cited Applications:
WB, IP, IF, IHC, CoIP

Species Specificity:
human, mouse, rat

Cited Species:
human, chicken, rat, mouse

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

IP : HeLa cells,

IHC : human prostate cancer tissue,

IF : 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

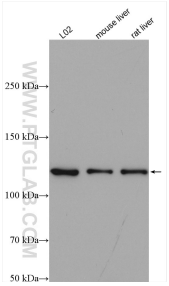
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

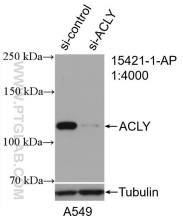
*** 20ul sizes contain 0.1% BSA

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
W: ptglab.com

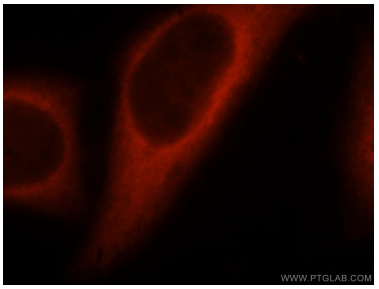
Selected Validation Data



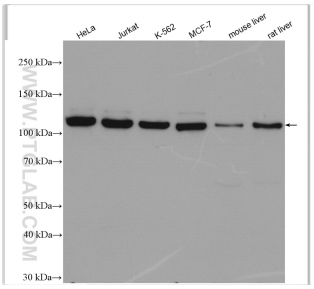
Various lysates were subjected to SDS PAGE followed by western blot with 15421-1-AP (ATP citrate lyase antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



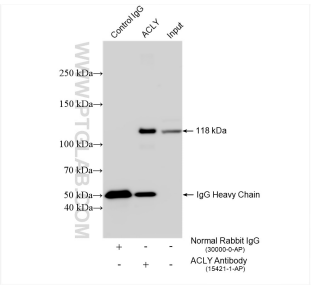
WB result of ACLY antibody (15421-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ACLY transfected A549 cells.



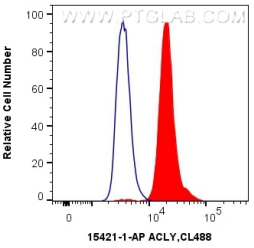
Immunofluorescent analysis of HepG2 cells, using ACLY antibody 15421-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



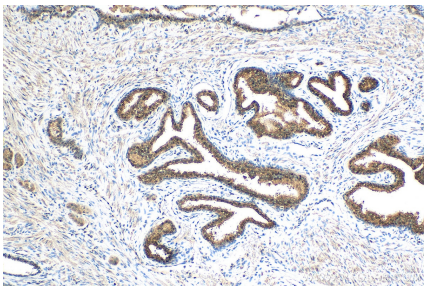
Various lysates were subjected to SDS PAGE followed by western blot with 15421-1-AP (ACLY antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



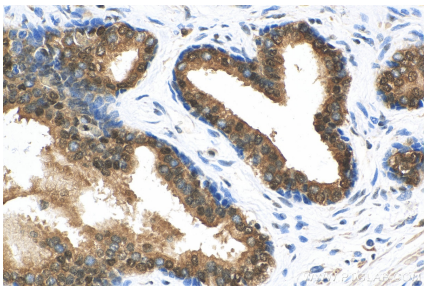
IP result of anti-ACLY (IP:15421-1-AP, 4ug; Detection:15421-1-AP 1:8000) with HeLa cells lysate 1320 ug.



1X10^6 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).