

Product Name: ATP-citrate synthase (phospho Ser455) Rabbit Polyclonal Antibody
Catalog #: APRab04284

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat,Monkey
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	125kDa

Antigen Information

Gene Name	ACLY
Alternative Names	ACLY; ATP-citrate synthase; ATP-citrate; pro-S-)-lyase; ACL; Citrate cleavage enzyme
Gene ID	47.0
SwissProt ID	P53396
Immunogen	The antiserum was produced against synthesized peptide derived from human ATP-Citrate Lyase around the phosphorylation site of Ser454. AA range:420-469

Background

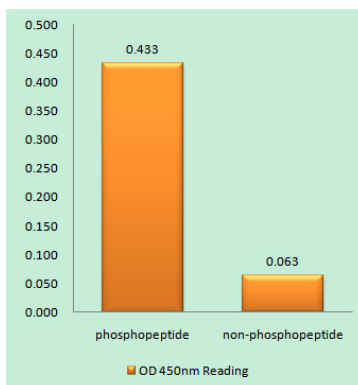
ATP citrate lyase(ACLY) Homo sapiens ATP citrate lyase is the primary enzyme responsible for the synthesis of cytosolic acetyl-

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. Multiple transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Dec 2014],catalytic activity:ADP + phosphate + acetyl-CoA + oxaloacetate = ATP + citrate + CoA.,function:ATP citrate-lyase is the primary enzyme responsible for the synthesis of cytosolic acetyl-CoA in many tissues. Has a central role in de novo lipid synthesis. In nervous tissue it may be involved in the biosynthesis of acetylcholine.,similarity:In the C-terminal section; belongs to the succinate/malate CoA ligase alpha subunit family.,similarity:In the N-terminal section; belongs to the succinate/malate CoA ligase beta subunit family.,subunit:Homotetramer.,

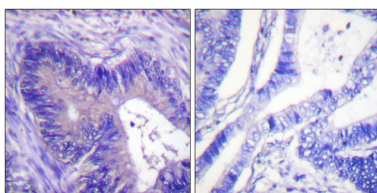
Research Area

Citrate cycle (TCA cycle);

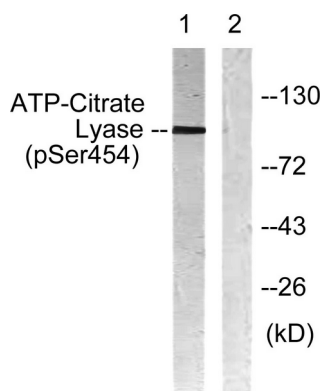
Image Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using ATP-Citrate Lyase (Phospho-Ser454) Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using ATP-Citrate Lyase (Phospho-Ser454) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COS7 cells treated with Calyculin 50nM 30 ' , using ATP-Citrate Lyase (Phospho-Ser454) Antibody. The lane on the right is blocked with the phospho peptide.

