



ATP-citrate synthase (phospho Ser455) Polyclonal Antibody

Catalog No	YP-Ab-02412
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	ACLY
Immunogen	The antiserum was produced against synthesized peptide derived from human ATP-Citrate Lyase around the phosphorylation site of Ser454. AA range:420-469
Specificity	Phospho-ATP-citrate synthase (S455) Polyclonal Antibody detects endogenous levels of ATP-citrate synthase protein only when phosphorylated at S455.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ATP-citrate synthase;ACLY;ATP-citrate;pro-S-) -lyase;ACL;Citrate cleavage enzyme
Observed Band	125kD
Calculated Molecular Weight	125kD
Cell Pathway	Cytoplasm, cytosol .
Tissue Specificity	Brain,Epithelium,Hippocampus,Liver,Lymph,Platelet,
Function	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.,

**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],

matters needing attention

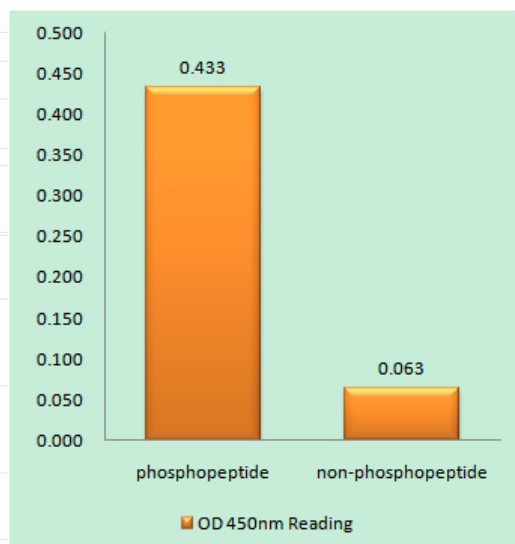
Avoid repeated freezing and thawing!

Usage suggestions

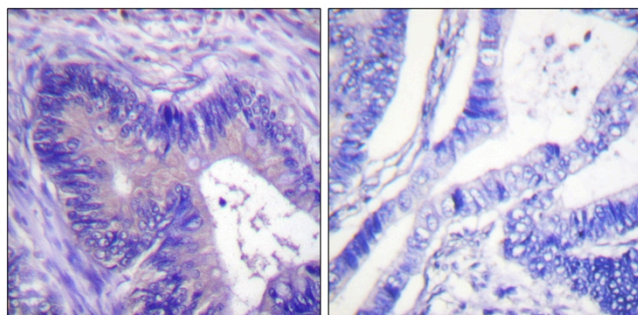
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



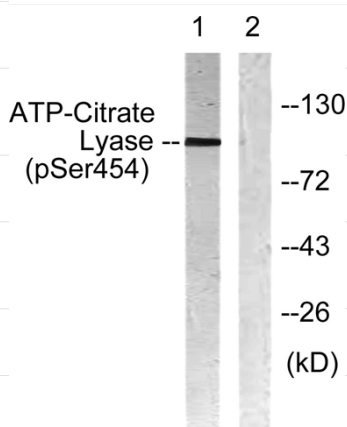
Products Images



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.