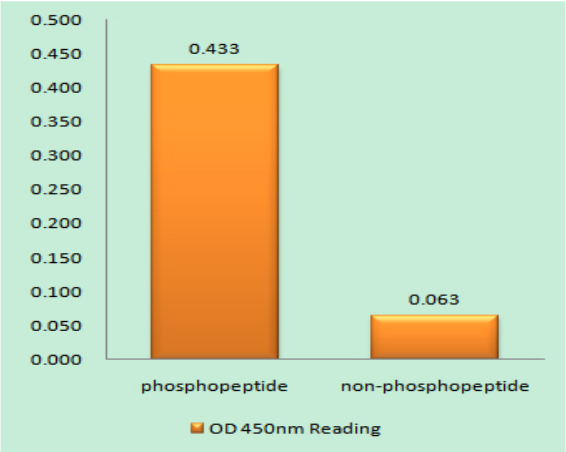
Best Tools for immunology Research

ATP-citrate synthase (phospho Ser455) Polyclonal Antibody

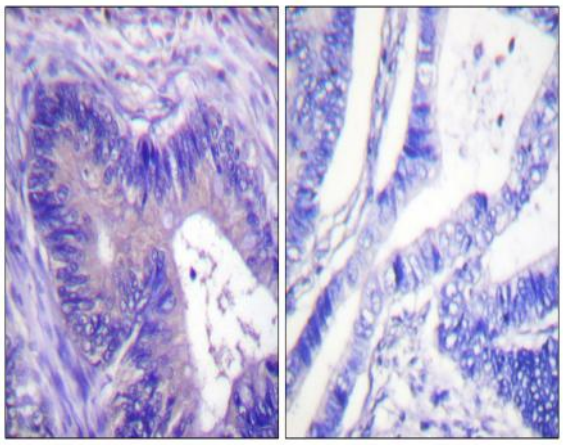
Catalog No :	YP0686
Reactivity :	Human;Mouse;Rat;Monkey
Applications :	WB;IHC;IF;ELISA
Target :	ATP-citrate synthase
Fields :	>>Citrate cycle (TCA cycle);>>Metabolic pathways
Gene Name :	ACLY
Protein Name :	ATP-citrate synthase
Human Gene Id :	47
Human Swiss Prot No :	P53396
Mouse Gene Id :	104112
Mouse Swiss Prot No :	Q91V92
Rat Gene Id :	24159
Rat Swiss Prot No :	P16638
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
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	125kD
Cell Pathway :	Citrate cycle (TCA cycle);
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 cholesterogenesis. 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],
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.,
Subcellular Location :	Cytoplasm, cytosol .
Expression :	Brain,Epithelium,Hippocampus,Liver,Lymph,Platelet,

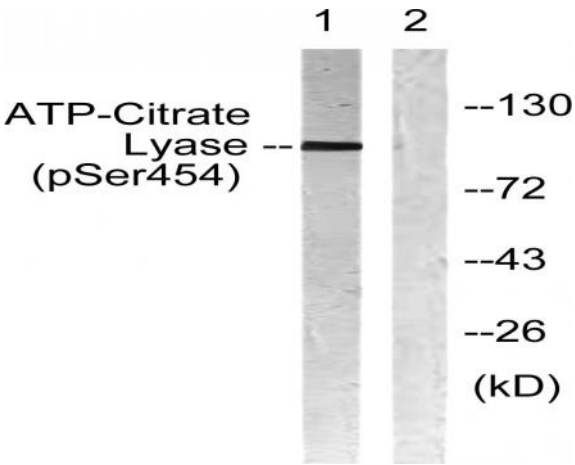
Products Images



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.