

ATP-citrate synthase Monoclonal Antibody

Catalog No: YM1013

Reactivity: Human; Mouse; Rat; Bovine; Chicken; Pig; sheep

Applications: WB;IF;FCM

Target: ATP-citrate synthase

Fields: >>Citrate cycle (TCA cycle);>>Metabolic pathways

Gene Name: ACLY

Protein Name: ATP-citrate synthase

P53396

Q91V92

Human Gene Id: 47

Human Swiss Prot

No:

Mouse Gene Id: 104112

Mouse Swiss Prot

No:

Rat Gene ld: 24159

Rat Swiss Prot No: P16638

Immunogen: Purified recombinant human ATP-citrate synthase (C-terminus) protein

fragments expressed in E.coli.

Specificity: ATP-citrate synthase Monoclonal Antibody detects endogenous levels of ATP-

citrate synthase protein.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution: WB 1:1000 - 1:2000. IF 1:100 - 1:500. Flow cytometry: 1:100 - 1:200. Not yet

tested in other applications.



Purification : Affinity purification

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 121kD

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,

Sort:

2442

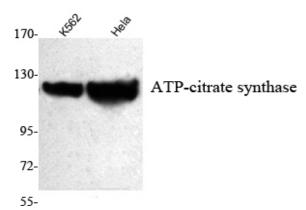
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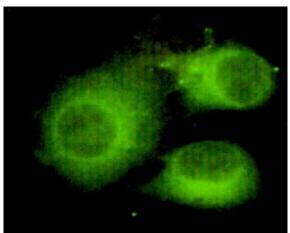
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Products Images

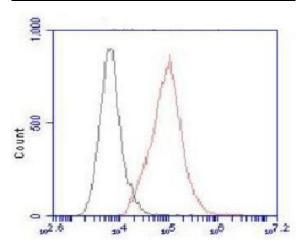
(kD)

Western Blot analysis using ATP-citrate synthase Monoclonal Antibody against K562, HeLa cell lysate.





Immunofluorescence analysis of HeLa cells using ATP-citrate synthase Monoclonal Antibody.



Flow cytometric analysis of HeLa cells stained with ATP-citrate synthase Monoclonal Antibody (red), followed by FITC-conjugated goat anti-mouse IgG. Black line histogram represents the isotype control, normal mouse IgG.