



Rabbit Anti-phospho-ATP citrate lyase (Ser455) antibody

SL3037R

Product Name:	phospho-ATP citrate lyase (Ser455)
Chinese Name:	磷酸化三磷酸腺柠檬酸裂解酶抗体
Alias:	ATP citrate lyase (phospho S455); ACL; ATP citrate (pro-S) lyase; ATP citrate synthase; Citrate cleavage enzyme; EC 2.3.3.8; A730098H14RIK; ACLY; ATP CITRATE LYASE; ATPCL; AW538652; Cce; CITRATE LYASE; CLATP; MGC124629; ACL; Acly; ACLY_HUMAN; ATP citrate lyase; ATP-citrate (pro-S)-lyase; ATP-citrate synthase; ATPcitrate synthase; OTTHUMP00000164773.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	122kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human ATP citrate lyase around the phosphorylation site of Ser455:TA(p-S)FS
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:[PubMed](#)

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. Two transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]

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.

Subunit:

Homotetramer.

Subcellular Location:

Cytoplasm.

Post-translational modifications:

ISGylated.

Acetylated at Lys-540, Lys-546 and Lys-554 by KAT2B/PCAF. Acetylation is promoted by glucose and stabilizes the protein, probably by preventing ubiquitination at the same sites. Acetylation promotes de novo lipid synthesis. Deacetylated by SIRT2.

Ubiquitinated at Lys-540, Lys-546 and Lys-554 by UBR4, leading to its degradation. Ubiquitination is probably inhibited by acetylation at same site.

Similarity:

In the N-terminal section; belongs to the succinate/malate CoA ligase beta subunit family.

In the C-terminal section; belongs to the succinate/malate CoA ligase alpha subunit family.

SWISS:

P53396

Gene ID:

47

Database links:

[Entrez Gene: 47](#) Human

Product Detail:

[Entrez Gene: 104112](#) Mouse

[Entrez Gene: 24159](#) Rat

[Omim: 108728](#) Human

[SwissProt: P53396](#) Human

[SwissProt: Q91V92](#) Mouse

[SwissProt: P16638](#) Rat

[Unigene: 387567](#) Human

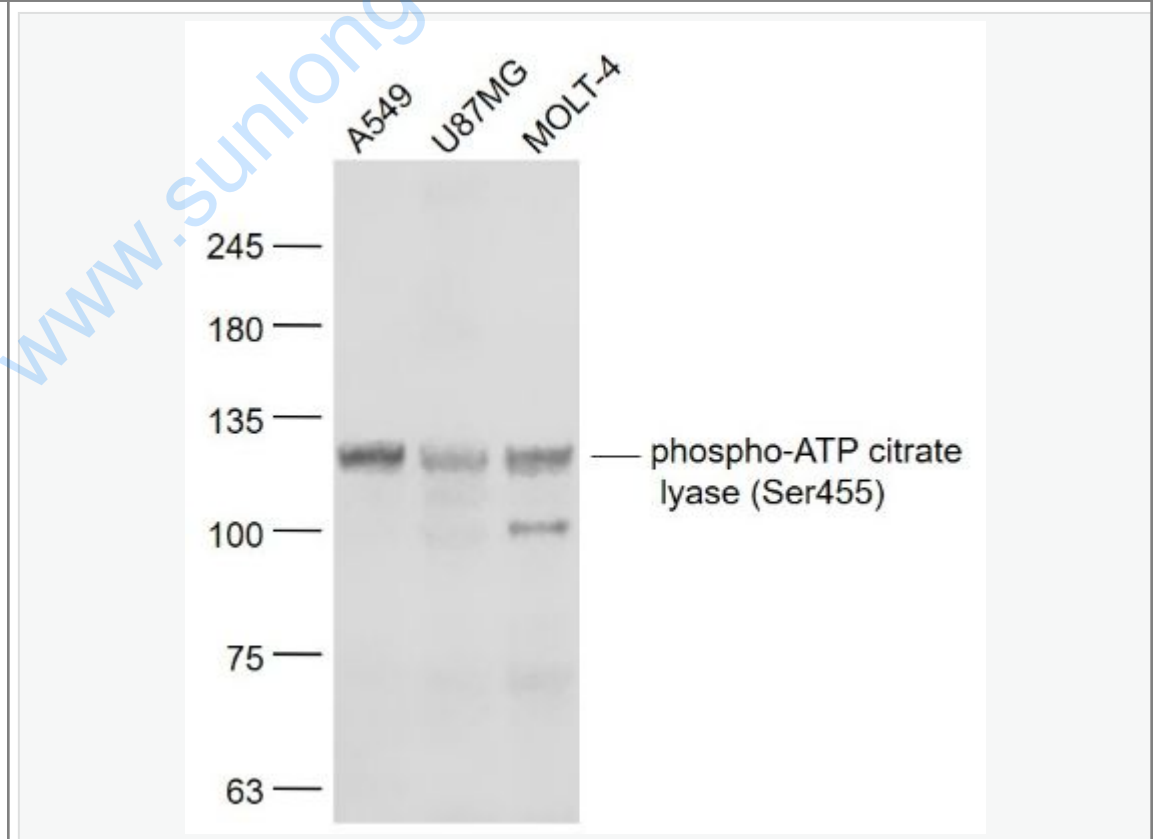
[Unigene: 282039](#) Mouse

[Unigene: 29771](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

A549(Human) Cell Lysate at 30 ug

U87MG(Human) Cell Lysate at 30 ug

MOLT-4(Human) Cell Lysate at 30 ug

Primary: Anti- phospho-ATP citrate lyase (Ser455) (SL3037R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 122 kD

Observed band size: 122 kD

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