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PCK1 Recombinant Mouse mAb

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Catalog # AP94617

Product Information

Application	WB, IHC-P, IHC-F, IF
Host	Rabbit
Clonality	Recombinant
Physical State	Liquid
Isotype	IgG1, Kappa
Purity	affinity purified by Protein G
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm.
SIMILARITY	Belongs to the phosphoenolpyruvate carboxykinase [GTP] family.
SUBUNIT	Monomer.
Post-translational modifications	Acetylation is increased on addition of glucose and appears to regulate the protein stability.
DISEASE	Defects in PCK1 are the cause of cytosolic phosphoenolpyruvate carboxykinase deficiency (C-PEPCKD) [MIM:261680]. A metabolic disorder resulting from impaired gluconeogenesis. It is a rare disease with less than 10 cases reported in the literature. Clinical characteristics include hypotonia, hepatomegaly, failure to thrive, lactic acidosis and hypoglycemia. Autoposy reveals fatty infiltration of both the liver and kidneys. The disorder is transmitted as an autosomal recessive trait.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	PCK1 is a main control point for the regulation of gluconeogenesis. This cytosolic enzyme, along with GTP, catalyzes the formation of phosphoenolpyruvate from oxaloacetate, with the release of carbon dioxide and GDP. The expression of the corresponding gene can be regulated by insulin, glucocorticoids, glucagon, cAMP, and diet. A mitochondrial isozyme has also been characterized.

Additional Information

Target/Specificity	Major sites of expression are liver, kidney and adipocytes.
Dilution	WB=1:500-1:1000,IHC-P=1:100-500,IHC-F=1:100-500,IF=0
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Background

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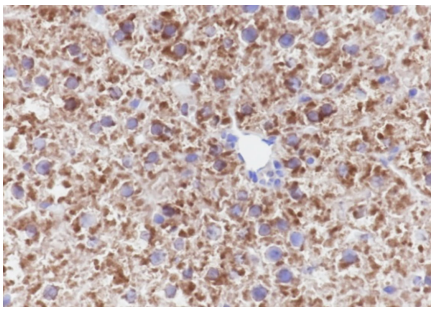
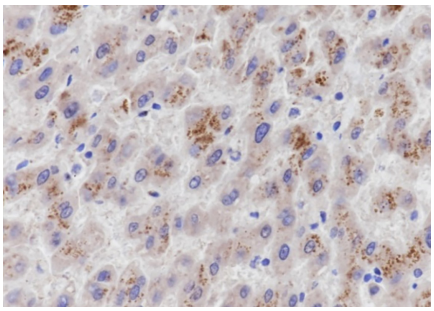
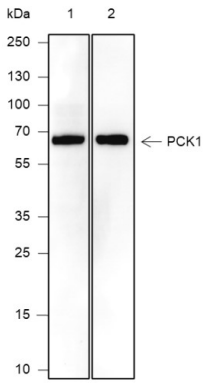
Images



Tissue: Rat liver Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary Ab dilution: 1:100 Primary Ab incubation condition: 1 hour at room temperature Secondary Ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94617



Tissue: Human liver Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary Ab dilution: 1:100 Primary Ab incubation condition: 1 hour at room temperature Secondary Ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94617



Blocking buffer: 5% NFDM/TBST Primary Ab dilution: 1:1000 Primary Ab incubation condition: room temperature 2h Secondary Ab: Goat Anti-Mouse IgG H&L (HRP) Lysate: 1: Human liver, 2: Rat kidney Protein loading quantity: 20 µg Exposure time: 60 s Predicted MW: 65 kDa Observed MW: 65 kDa