

PEPCK-C Polyclonal Antibody

Catalog No: YT5236

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: PEPCK-C

Fields: >>Glycolysis / Gluconeogenesis;>>Citrate cycle (TCA cycle);>>Pyruvate

metabolism;>>Metabolic pathways;>>PPAR signaling pathway;>>FoxO signaling pathway;>>PI3K-Akt signaling pathway;>>AMPK signaling pathway;>>Insulin signaling pathway;>>Adipocytokine signaling pathway;>>Glucagon signaling pathway;>>Insulin resistance;>>Proximal tubule bicarbonate reclamation

Gene Name: PCK1

Protein Name: Phosphoenolpyruvate carboxykinase cytosolic [GTP]

P35558

Q9Z2V4

Human Gene Id: 5105

Human Swiss Prot

No:

Mouse Gene Id: 18534

Mouse Swiss Prot

No:

Rat Gene Id: 362282

Rat Swiss Prot No: P07379

Immunogen: The antiserum was produced against synthesized peptide derived from the

Internal region of human PCK1. AA range:491-540

Specificity: PEPCK-C Polyclonal Antibody detects endogenous levels of PEPCK-C protein.

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: 1:100-300 ELISA: 1:20000.. 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: 65kD

Cell Pathway: Glycolysis / Gluconeogenesis; Citrate cycle (TCA cycle); Pyruvate

metabolism;PPAR;Insulin Receptor;Adipocytokine;

Background: This gene is a main control point for the regulation of gluconeogenesis. The

cytosolic enzyme encoded by this gene, along with GTP, catalyzes the formation of phosphoenolpyruvate from oxaloacetate, with the release of carbon dioxide and GDP. The expression of this gene can be regulated by insulin, glucocorticoids, glucagon, cAMP, and diet. Defects in this gene are a cause of cytosolic

phosphoenolpyruvate carboxykinase deficiency. A mitochondrial isozyme of the encoded protein also has been characterized. [provided by RefSeq, Jul 2008],

Function: catalytic activity:GTP + oxaloacetate = GDP + phosphoenolpyruvate +

CO(2).,cofactor:Binds 1 manganese ion per subunit.,disease:Defects in PCK1 are the cause of cytosolic phosphoenolpyruvate carboxykinase deficiency (cytosolic PEPCK deficiency) [MIM:261680]. PEPCK deficiency is 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 hypoglycaemia. Autoposy reveals fatty infiltration of both the liver and kidneys. The disorder is transmitted as an autosomal recessive trait.,enzyme regulation:Activity is affected by a number of hormones regulating this metabolic process (such as glucagon, insulin,

or glucocorticoids).,function:Catalyzes the conversion of oxaloacetate (OAA) to

phosphoenolpyruvate (PEP), the rate-limiti

Subcellular Cytoplasm, cytosol . Endoplasmic reticulum . Phosphorylation at Ser-90

Location : promotes translocation to the endoplasmic reticulum. .

Expression : Major sites of expression are liver, kidney and adipocytes.

Tag: hot

Sort : 11822

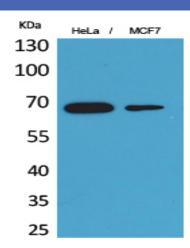
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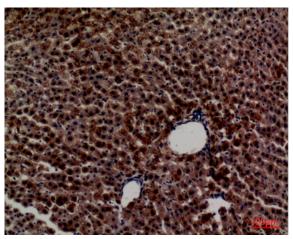
Host: Rabbit

Modifications: Unmodified

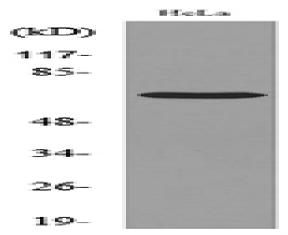
Products Images



Western Blot analysis of HeLa, MCF7 cells using PEPCK-C Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded rat-liver, antibody was diluted at 1:100



Western blot analysis of lysate from HeLa cells, using PCK1 Antibody.