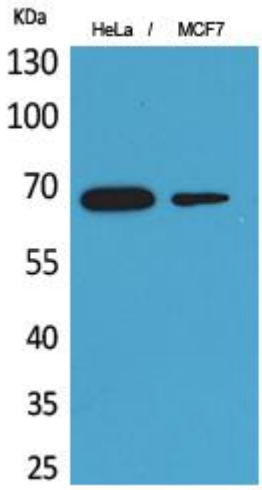
PEPCK-C Monoclonal Antibody

Catalog No	YP-mAb-04325
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PCK1
Protein Name	Phosphoenolpyruvate carboxykinase cytosolic [GTP]
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human PCK1. AA range:491-540
Specificity	PEPCK-C Monoclonal Antibody detects endogenous levels of PEPCK-C protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PCK1; PEPCK1; Phosphoenolpyruvate carboxykinase, cytosolic [GTP]; PEPCK-C; Phosphoenolpyruvate carboxylase
Observed Band	65kD
Cell Pathway	Cytoplasm, cytosol . Endoplasmic reticulum . Phosphorylation at Ser-90 promotes translocation to the endoplasmic reticulum. .
Tissue Specificity	Major sites of expression are liver, kidney and adipocytes.
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

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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using PEPCK-C Monoclonal Antibody