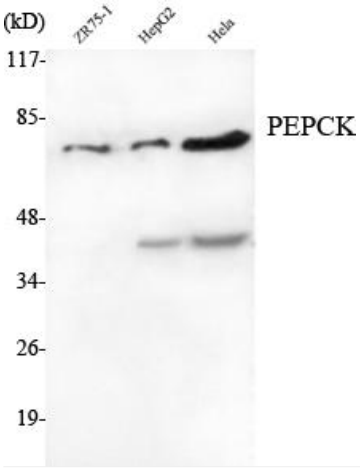
PEPCK Monoclonal Antibody

Catalog No	YP-Ab-03441
Isotype	IgG
Reactivity	Human;Mouse;Rat;Bovine;Dog;Pig
Applications	WB
Gene Name	PCK2
Protein Name	Phosphoenolpyruvate carboxykinase [GTP] mitochondrial
Immunogen	Purified recombinant human PEPCK (C-terminus) protein fragments expressed in E.coli.
Specificity	PEPCK Monoclonal Antibody detects endogenous levels of PEPCK protein.
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/1000 - 1/2000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PCK2; PEPCK2; Phosphoenolpyruvate carboxykinase [GTP]; mitochondrial; PEPCK-M; Phosphoenolpyruvate carboxylase
Observed Band	
Cell Pathway	Mitochondrion.
Tissue Specificity	Liver,Neuroblastoma,Placenta,
Function	catalytic activity:GTP + oxaloacetate = GDP + phosphoenolpyruvate + CO(2).,cofactor:Binds 1 manganese ion per subunit.,cofactor:Manganese.,disease:Defects in PCK2 are the cause of mitochondrial phosphoenolpyruvate carboxykinase deficiency (mitochondrial PEPCK deficiency) [MIM:261650]. 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.,function:Catalyzes the conversion of oxaloacetate (OAA) to phosphoenolpyruvate (PEP), the rate-limiting step in the metabolic pathway that produces glucose from lactate and other precursors derived from the citric acid

Background	This gene encodes a mitochondrial enzyme that catalyzes the conversion of oxaloacetate to phosphoenolpyruvate in the presence of guanosine triphosphate (GTP). A cytosolic form of this protein is encoded by a different gene and is the key enzyme of gluconeogenesis in the liver. Alternatively spliced transcript variants have been described. [provided by RefSeq, Apr 2014],
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 using PEPCK Monoclonal Antibody against ZR75-1, HepG2, HeLa cell lysate.