



# PCB Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-02734
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB
<b>Gene Name</b>	PC
<b>Protein Name</b>	Pyruvate carboxylase mitochondrial
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PC. AA range:357-406
<b>Specificity</b>	PCB Monoclonal Antibody detects endogenous levels of PCB protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PC; Pyruvate carboxylase; mitochondrial; Pyruvic carboxylase; PCB
<b>Observed Band</b>	120kD
<b>Cell Pathway</b>	Mitochondrion matrix .
<b>Tissue Specificity</b>	Epithelium,Kidney,Liver,Lung,
<b>Function</b>	catalytic activity:ATP + pyruvate + HCO <sub>3</sub> <sup>-</sup> = ADP + phosphate + oxaloacetate.,cofactor:Binds 1 manganese ion per subunit.,cofactor:Biotin.,disease:Defects in PC are the cause of pyruvate carboxylase deficiency (PC deficiency) [MIM:266150]. PC deficiency leads to lactic acidosis, mental retardation and death. It occurs in three forms: mild or type A, severe neonatal or type B, and a very mild lacticacidemia.,function:Pyruvate carboxylase catalyzes a 2-step reaction, involving the ATP-dependent carboxylation of the covalently attached biotin in the first step and the transfer of the carboxyl group to pyruvate in the second. Catalyzes in a tissue specific manner, the initial reactions of glucose (liver, kidney) and lipid (adipose tissue, liver, brain) synthesis from pyruvate.,online information:Pyruvate carboxylase entry,pathway:Carbohydrate biosynthesis; gluconeogenesis.,similarity:Conta
<b>Background</b>	This gene encodes pyruvate carboxylase, which requires biotin and ATP to catalyse the carboxylation of pyruvate to oxaloacetate. The active enzyme is a



homotetramer arranged in a tetrahedron which is located exclusively in the mitochondrial matrix. Pyruvate carboxylase is involved in gluconeogenesis, lipogenesis, insulin secretion and synthesis of the neurotransmitter glutamate. Mutations in this gene have been associated with pyruvate carboxylase deficiency. Alternatively spliced transcript variants with different 5' UTRs, but encoding the same protein, have been found for this gene. [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**

