

# Immunotag™ PCB Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT3616
Product Description	Immunotag™ PCB Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PCB
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from PCB, at AA range: 330-410
Specificity	PCB Polyclonal Antibody detects endogenous levels of PCB protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	PC
Accession No.	P11498 Q05920 P52873
Alternate Names	PC; Pyruvate carboxylase; mitochondrial; Pyruvic carboxylase; PCB

## Antibody Specification

Description	pyruvate carboxylase(PC) Homo sapiens 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],
Cell Pathway/ Category	Citrate cycle (TCA cycle),Pyruvate metabolism,
Protein Expression	Epithelium,Kidney,Liver,Lung,
Subcellular Localization	cytoplasm,mitochondrion,mitochondrial matrix,cytosol,
Protein Function	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:Contains 1 ATP-grasp domain.,similarity:Contains 1 biotin carboxylation domain.,similarity:Contains 1 biotinyl-binding domain.,similarity:Contains 1 carboxyltransferase domain.,subunit:Homotetramer.,
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