Best Tools for immunology Research

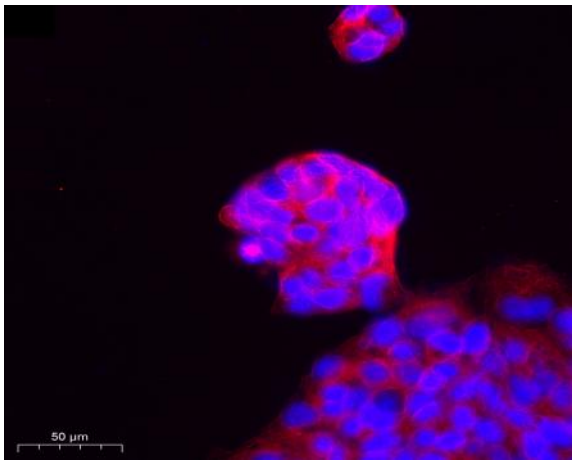
PCB Polyclonal Antibody

Catalog No :	YT3616
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	PCB
Fields :	>>Citrate cycle (TCA cycle);>>Pyruvate metabolism;>>Metabolic pathways;>>Carbon metabolism;>>Biosynthesis of amino acids
Gene Name :	PC
Protein Name :	Pyruvate carboxylase mitochondrial
Human Gene Id :	5091
Human Swiss Prot No :	P11498
Mouse Swiss Prot No :	Q05920
Rat Gene Id :	25104
Rat Swiss Prot No :	P52873
Immunogen :	The antiserum was produced against synthesized peptide derived from human PC. AA range:357-406
Specificity :	PCB Polyclonal Antibody detects endogenous levels of PCB 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 1:100-300 Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-

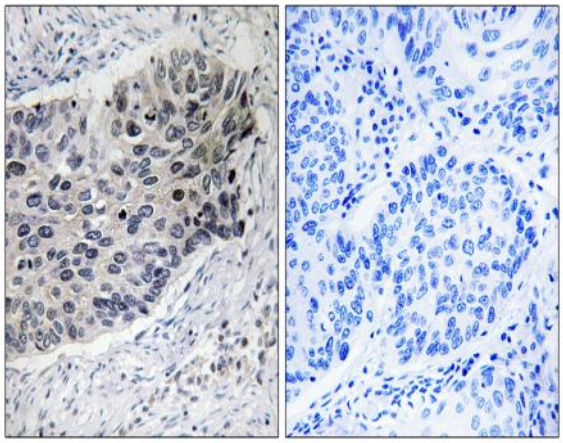
	chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	120kD
Cell Pathway :	Citrate cycle (TCA cycle);Pyruvate metabolism;
Background :	This gene encodes pyruvate carboxylase, which requires biotin and 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],
Function :	catalytic activity:ATP + pyruvate + HCO(3)(-) = 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
Subcellular Location :	Mitochondrion matrix .
Expression :	Epithelium,Kidney,Liver,Lung,
Sort :	1432
No3 :	ab126707
No4 :	1
Host :	Rabbit

Modifications : Unmodified

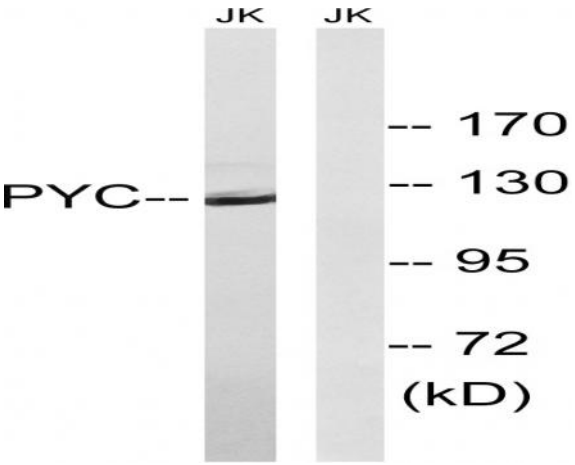
Products Images



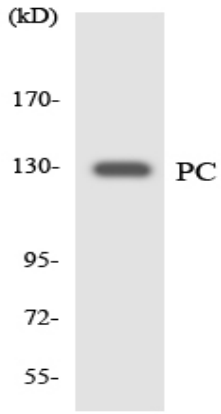
Immunofluorescence analysis of Siha cell. 1,primary Antibody was diluted at 1:100(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - AFluor 594 Secondary antibody(catalog No: RS3611) was diluted at 1:500(room temperature, 50min).



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using PC Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, using PC Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HT-29 cells using PC antibody.