

Rabbit PCCB Polyclonal Antibody | anti-PCCB antibody

PCCB Antibody (Center)

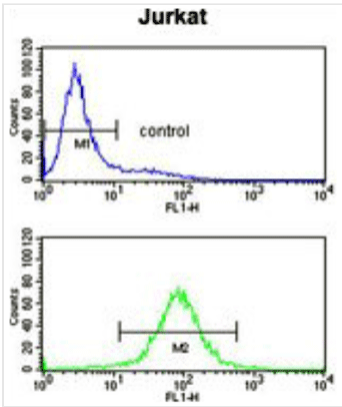
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA284713	Rabbit	Human (Predicted Reactivity: Bovine, Mouse, Pig)	Flow Cytometry, Functional Assay, ELISA, Western Blot

PRODUCT SYNONYMS

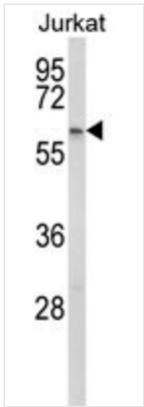
PCCB; Polyclonal Antibody; PCCB Antibody (Center); Propionyl-CoA carboxylase beta chain; mitochondrial; PCCase subunit beta; Propanoyl-CoA:carbon dioxide ligase subunit beta; anti-PCCB antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Bovine, Mouse, Pig)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This PCCB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 82-107 amino acids from the Central region of human PCCB.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Sequence Positions	82-107
Sequence Length	559
Applicable Applications for anti-PCCB antibody	FCM/FACS (Flow Cytometry), ELISA, WB (Western Blot)
Antigen Source	HUMAN
Function	This is one of the 2 subunits of the biotin-dependent propionyl-CoA carboxylase (PCC), a mitochondrial enzyme involved in the catabolism of odd chain fatty acids, branched-chain amino acids isoleucine, threonine, methionine, and valine and other metabolites (PubMed: ,PubMed:). Propionyl-CoA carboxylase catalyzes the carboxylation of propionyl-CoA/propanoyl-CoA to D-methylmalonyl-CoA/(S)-methylmalonyl-CoA (PubMed: ,PubMed:). Within the holoenzyme, the alpha subunit catalyzes the ATP-dependent carboxylation of the biotin carried by the biotin carboxyl carrier (BCC) domain, while the beta subunit then transfers the carboxyl group from carboxylated biotin to propionyl-CoA (By similarity). Propionyl-CoA carboxylase also significantly acts on butyryl-CoA/butanoyl-CoA, which is converted to ethylmalonyl-CoA/(2S)-ethylmalonyl-CoA at a much lower rate (PubMed:). Other alternative minor substrates include (2E)-butenoyl-CoA/crotonoyl-CoA (By similarity).
Cellular Location	Mitochondrion matrix
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



FCM/FACS (Flow Cytometry)
PCCB Antibody (Center) flow cytometry analysis of Jurkat cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



WB (Western Blot)
Western blot analysis of PCCB Antibody (Center) in Jurkat cell line lysates (35ug/lane). PCCB (arrow) was detected using the purified Pab.

ADDITIONAL INFORMATION

Related Product Information for anti-PCCB antibody	PCCB is a subunit of the propionyl-CoA carboxylase (PCC) enzyme, which is involved in the catabolism of propionyl-CoA. PCC is a mitochondrial enzyme that probably acts as a dodecamer of six alpha subunits and six beta subunits.
Product Categories/Family for anti-PCCB antibody	Metabolism; Signal Transduction
References	Yang,X., et.al.,Mol. Genet. Metab. 81 (4), 335-342 (2004)

NCBI AND UNIPROT INFORMATION

NCBI GI #	119943100
NCBI GeneID	5096
NCBI Accession #	NP_000523.2; NP_001171485.1
NCBI GenBank Nucleotide #	NM_000532.4
UniProt Accession #	P05166; Q16813; Q96CX0; B7Z2Z4
Molecular Weight	Calculated MW: 58216
NCBI Official Full Name	propionyl-CoA carboxylase beta chain, mitochondrial isoform 1
NCBI Official Synonym Full Names	propionyl CoA carboxylase, beta polypeptide
NCBI Official Symbol	PCCB
NCBI Protein Information	propionyl-CoA carboxylase beta chain, mitochondrial
UniProt Protein Name	Propionyl-CoA carboxylase beta chain, mitochondrial
UniProt Gene Name	PCCB
UniProt Synonym Gene Names	PCCase subunit beta
UniProt Entry Name	PCCB_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.