

PCCB Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8843c

Specification

PCCB Antibody (Center) - Product Information

Application	WB, FC,E
Primary Accession	P05166
Other Accession	P79384 , Q99MN9 , Q2TBR0
Reactivity	Human
Predicted	Bovine, Mouse, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	58216
Antigen Region	82-107

PCCB Antibody (Center) - Additional Information

Gene ID 5096

Other Names

Propionyl-CoA carboxylase beta chain, mitochondrial, PCCase subunit beta, Propanoyl-CoA:carbon dioxide ligase subunit beta, PCCB

Target/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.

Dilution

WB~~1:1000
FC~~1:10~50

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.

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.

Precautions

PCCB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PCCB Antibody (Center) - Protein Information

Name PCCB ([HGNC:8654](#))

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:[6765947](#), PubMed:[15890657](#)). Propionyl-CoA carboxylase catalyzes the carboxylation of propionyl-CoA/propanoyl-CoA to D-methylmalonyl-CoA/(S)-methylmalonyl-CoA (PubMed:[6765947](#), PubMed:[15890657](#)). 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:[6765947](#)). Other alternative minor substrates include (2E)- butenoyl-CoA/crotonoyl-CoA (By similarity).

Cellular Location

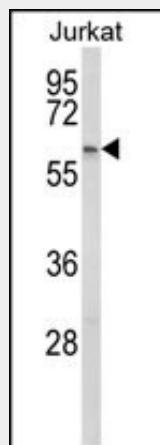
Mitochondrion matrix

PCCB Antibody (Center) - Protocols

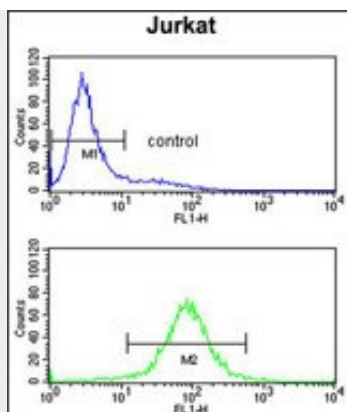
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PCCB Antibody (Center) - Images



Western blot analysis of PCCB Antibody (Center) (Cat. #AP8843c) in Jurkat cell line lysates (35ug/lane). PCCB (arrow) was detected using the purified Pab.



PCCB Antibody (Center) (Cat. #AP8843c) 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.

PCCB Antibody (Center) - Background

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.

PCCB Antibody (Center) - References

Yang, X., et al., Mol. Genet. Metab. 81 (4), 335-342 (2004)