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PCCB Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8843c

Specification

PCCB Antibody (Center) - Product Information

Application	**FC, WB,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
FC~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

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

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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:15890657, PubMed:6765947). Propionyl-CoA carboxylase catalyzes the carboxylation of propionyl-CoA/propanoyl-CoA to D-methylmalonyl- CoA/(S)-methylmalonyl-CoA (PubMed:15890657, PubMed:6765947). 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).

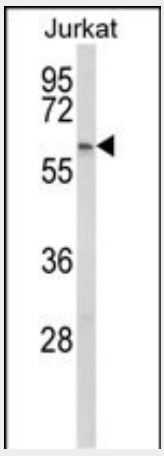
Cellular Location
Mitochondrion matrix

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 Cytomety
- 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.

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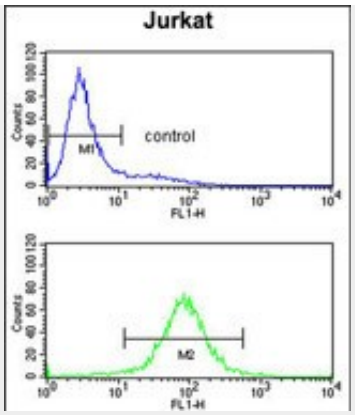

PCCB Antibody (Center) (Cat. #AP8843c) flow cytometry analysis of Jurkat cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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)