

## PCBD1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9111c

### Product Information

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<b>Application</b>	WB, IHC-P, FC, E
<b>Primary Accession</b>	<a href="#">P61457</a>
<b>Other Accession</b>	<a href="#">P61459</a> , <a href="#">Q3ZBD3</a>
<b>Reactivity</b>	Human, Mouse
<b>Predicted</b>	Bovine, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB21140
<b>Calculated MW</b>	12000
<b>Antigen Region</b>	11-37

### Additional Information

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<b>Gene ID</b>	5092
<b>Other Names</b>	Pterin-4-alpha-carbinolamine dehydratase, PHS, 4-alpha-hydroxy-tetrahydropterin dehydratase, Dimerization cofactor of hepatocyte nuclear factor 1-alpha, DCoH, Dimerization cofactor of HNF1, Phenylalanine hydroxylase-stimulating protein, Pterin carbinolamine dehydratase, PCD, PCBD1, DCOH, PCBD
<b>Target/Specificity</b>	This PCBD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 11-37 amino acids from the Central region of human PCBD1.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	PCBD1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

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<b>Name</b>	PCBD1
<b>Synonyms</b>	DCOH, PCBD
<b>Function</b>	Involved in tetrahydrobiopterin biosynthesis (By similarity). Seems to both prevent the formation of 7-pterins and accelerate the formation of quinonoid-BH2. Coactivator for HNF1A-dependent transcription (By similarity). Regulates the dimerization of homeodomain protein HNF1A and enhances its transcriptional activity (By similarity). Also acts as a coactivator for HNF1B-dependent transcription (PubMed: <a href="#">24204001</a> ).
<b>Cellular Location</b>	Cytoplasm. Nucleus. Note=Recruited to the nucleus through the interaction with HNF1B.

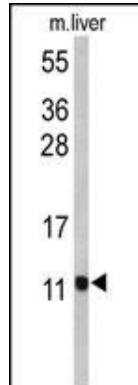
## Background

PCBD1 encodes pterin-4 alpha-carbinolamine dehydratase, an enzyme involved in phenylalanine hydroxylation. A deficiency of this enzyme leads to hyperphenylalaninemia. The enzyme regulates the homodimerization of the transcription factor hepatocyte nuclear factor 1 (HNF1).

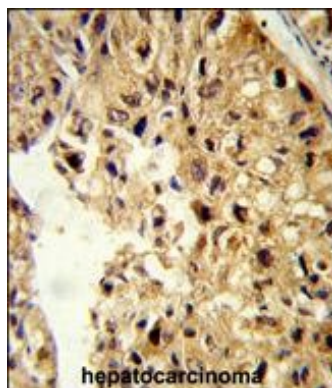
## References

Schnetz-Boutaud,N.C., et.al., Genes Brain Behav. 8 (8), 753-757 (2009)  
Clot,F., et.al., Brain 132 (PT 7), 1753-1763 (2009)

## Images

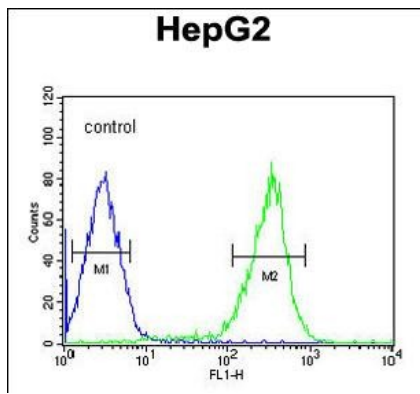


Western blot analysis of PCBD1 Antibody (Center) (Cat. #AP9111c) in mouse liver tissue lysates (35ug/lane). PCBD1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with PCBD1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

PCBD1 Antibody (Center) (Cat. #AP9111c) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the



analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.