

**PCBD1 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9111c**

**Specification**

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**PCBD1 Antibody (Center) - Product Information**

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

**PCBD1 Antibody (Center) - Additional Information**

**Gene ID** 5092

**Other Names**

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

**Target/Specificity**

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.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
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**

PCBD1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**PCBD1 Antibody (Center) - Protein Information**

**Name** PCBD1

**Synonyms** DCOH, PCBD

**Function** 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:[24204001](#)).

**Cellular Location**

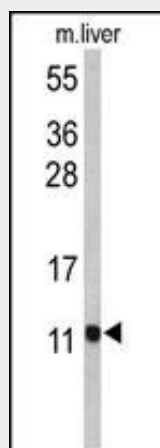
Cytoplasm. Nucleus. Note=Recruited to the nucleus through the interaction with HNF1B.

**PCBD1 Antibody (Center) - Protocols**

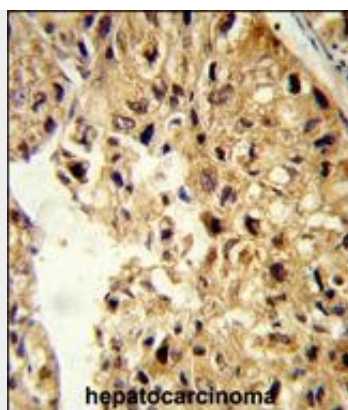
Provided below are standard protocols that you may find useful for product applications.

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

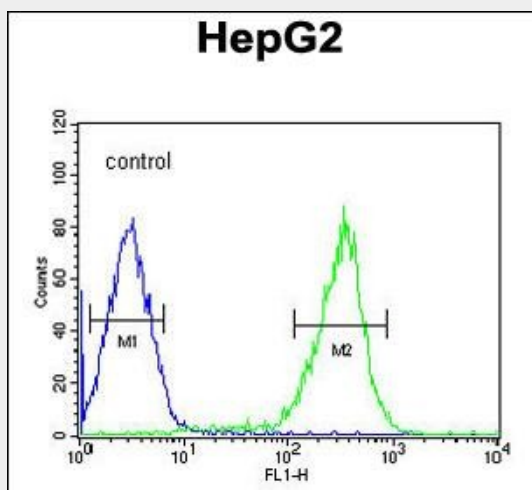
**PCBD1 Antibody (Center) - Images**



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.

#### PCBD1 Antibody (Center) - 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).

#### PCBD1 Antibody (Center) - 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)