

**PCBD1 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9111c****Specification**

---

**PCBD1 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [P61457](#)**PCBD1 Antibody (Center) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP9111c](/products/AP9111c) was selected from the Center region of human PCBD1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**PCBD1 Antibody (Center) Blocking Peptide - 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: <http://www.uniprot.org/citations/24204001> target="\_blank">24204001</a>).

**Cellular Location**

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

**PCBD1 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**PCBD1 Antibody (Center) Blocking Peptide - Images****PCBD1 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)