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PCBD1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9111c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P61457
Other Accession	P61459, Q3ZBD3
Reactivity	Human, Mouse
Predicted	Bovine, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21140
Calculated MW	12000
Antigen Region	11-37

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~~1:100~500 FC~~1:10~50 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	PCBD1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

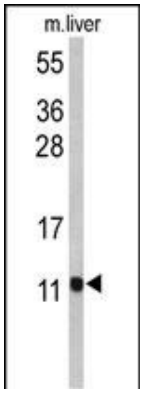
Background

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).

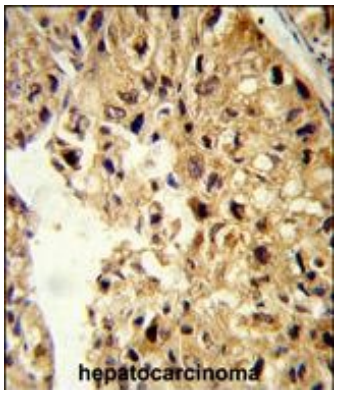
References

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

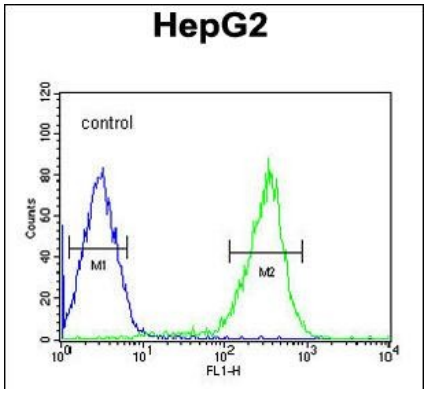


Western blot analysis of PCBD1 Antibody (Center) (Cat. #AP9111c) in mouse liver tissue lysates (35ug/lane). PCBD1 (arrow) was detected using the purified Pab.



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'.