

Product Name: KD-Validated PCBD1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00975**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 12.0kDa

Antigen Information

Gene Name	PCBD1
Alternative Names	Pterin-4 Alpha-Carbinolamine Dehydratase 1; PCD; DCOH; PCBD; 6-Pyruvoyl-Tetrahydropterin Synthase/Dimerization Cofactor Of Hepatocyte Nuclear Factor 1 Alpha (TCF1); Pterin-4 Alpha-Carbinolamine Dehydratase/Dimerization Cofactor Of Hepatocyte Nuclear Factor 1 Alpha; Phenylalanine Hydroxylase-Stimulating Protein; 4-Alpha-Hydroxy-Tetrahydropterin Dehydratase; Pterin-4-Alpha-Carbinolamine Dehydratase; Dimerizing Cofactor For HNF1; EC 4.2.1.96; PHS; Pterin-4 Alpha-Carbinolamine Dehydratase/Dimerization Cofactor Of Hepatocyte Nuclear Factor 1 Alpha (TCF1); Pterin-4a-Carbinolamine Dehydratase (Dimerization Cofactor Of Hepatic Nuclear Factor 1-Alpha); Dimerization Cofactor Of Hepatocyte Nuclear Factor 1-Alpha; Pterin-4-Alpha Carbinolamine Dehydratase; Pterin Carbinolamine Dehydratase; Dimerization Cofactor Of HNF1; DCoH

Gene ID	5092.0
SwissProt ID	P61457
Immunogen	A synthesized peptide derived from human PCBD1

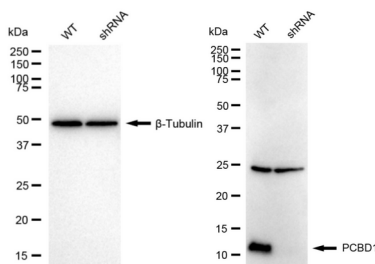
Background

This gene encodes a member of the pterin-4- α -carbinolamine dehydratase family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The encoded protein functions as both a dehydratase involved in tetrahydrobiopterin biosynthesis, and as a cofactor for HNF1A-dependent transcription. A deficiency of this enzyme leads to hyperphenylalaninemia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

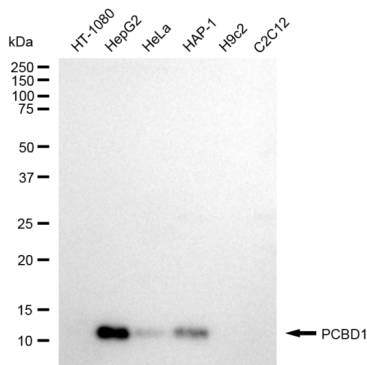
Research Area

Signal Transduction, Epigenetics and Nuclear Signaling, Metabolism

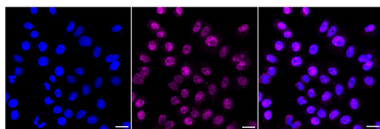
Image Data



Western blotting analysis using PCBD1 antibody (KVA00975). PCBD1 expression in wild-type (WT) and PCBD1 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with PCBD1 antibody (KVA00975, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using PCBD1 antibody (KVA00975). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PCBD1 antibody (KVA00975, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with PCBD1 antibody (KVA00975, 1:1,000). Nuclei were stained blue with DAPI; PCBD1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar: 20 μ m.