

# Recombinant Human PCBD1 Protein (His Tag)

Catalog Number:PKSH032981



**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

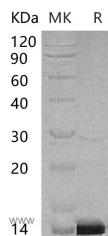
## Description

<b>Synonyms</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>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Ala2-Thr104
<b>Accession</b>	P61457
<b>Calculated Molecular Weight</b>	14.2 kDa
<b>Observed molecular weight</b>	14 kDa
<b>Tag</b>	N-His

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
<b>Formulation</b>	Supplied as a 0.2 $\mu$ m filtered solution of 20mM Tris-HCl, 150mM NaCl, 1mM DTT, pH 8.0.
<b>Reconstitution</b>	Not Applicable

## Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Pterin-4- $\alpha$ -Carbinolamine Dehydratase (PCBD1) is the founding member of the Pterin-4- $\alpha$ -Carbinolamine Dehydratase Family. PCBD1 is involved in Tetrahydrobiopterin biosynthesis. It seems to prevent the formation of 7-Pterins and accelerate the formation of Quinonoid-BH2. Furthermore, PCBD1 regulates the homodimerization of the transcription factor Hepatocyte Nuclear Factor 1 (HNF1) and enhances its transcriptional activity. Defects in PCBD1 are the cause of BH4-Deficient Hyperphenylalaninemia Type D (HPABH4D). HPABH4D is characterized by the excretion of 7-substituted Pterins in the urine of affected patients.

## For Research Use Only

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Fax: 1-832-243-6017