

**32-7224: Recombinant Human Pterin-4-a-Carbinolamine Dehydratase/PHS/PCBD1 (N-6His)**

**Gene :** PCBD1  
**Gene ID :** 5092  
**Uniprot ID :** P61457

**Description**

Source: E.coli.  
MW :14.2kD.

Recombinant Human PCBD1 is produced by our E.coli expression system and the target gene encoding Ala2-Thr104 is expressed with a 6His tag at the N-terminus. Pterin-4-a-Carbinolamine Dehydratase (PCBD1) is the founding member of the Pterin-4-a-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.

**Product Info**

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, 1mM DTT, pH 8.0.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHHSSGLVPRGSHMAGKAHRLSAEERDQLLPNLRVAVGWNELEGRDAIFKQFHFKDFNRAFGFMT  
RVALQAEKLDHHPEWFNVYKVKVHITLSTHECAGLSERDINLASFIEQVAVSMT

**Application Note**

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.