



Recombinant Protein Technical Manual

Recombinant Human PCBD1 Protein (His Tag)

RPES3527

Product Data:

Product SKU: RPES3527

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P61457

Protein Information:

Molecular Mass: 14.2 kDa

AP Molecular Mass: 14 kDa

Tag: N-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: 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.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, 1mM DTT, pH 8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: 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

Immunogen Information:

Sequence: Ala2-Thr104

Background:

Pterin-4- α -Carbinolamine Dehydratase (PCBD1) is the founding member of the Pterin-4- α -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.