

Recombinant Human coproporphyrinogen oxidase, His-tagged

Cat. No. CPOX-527H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	CPOX, 111-454aa , Human, His tag, E.coli
Species	Human
Source	E.coli
ProteinLength	111-454 a.a.
Description	Coproporphyrinogen-III oxidase, mitochondrial precursor, also known as CPOX, is a 454 amino acid mitochondrial enzyme that is localized to the inner membrane space of erythrocytes. It participates in the sixth step of heme biosynthesis by catalyzing the formation of protoporphyrinogen IX from coproporphyrinogen III. Mutations in human CPOX gene predict the clinical outcome of the disease, with either hepatic hereditary coproporphyria or hematological manifestations of erythropoietic harderoporphyria. Recombinant human CPOX protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT
Molecular Mass	41.6 kDa (367aa) confirmed by MALDI-TOF
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSTSLGRPE EEDELAHRC SSFMAPPVTD LGELRRRPGD MKTKMELLIL ETQAQVCQAL AQVDGGANFS VDRWERKEGG GGISCVLQDG CVFEKAGVSI SVVHGNLSEE AAKQMRSRGK VLKTKDGKLP

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FCAMGVSSVI HPKNPHAPTI HFNYRYFEVE EADGNKQWWF GGGCDLTPTY
 LNQEDAVHFH RTLKEACDQH GPDLYPKFKK WCDDYFFIAH RGERRGIGGI
 FFDDLSPSK EEVFRFVQSC ARAVVPSYIP LVKKHCDDSF TPQEKLWQQL
 RRGRYVEFNL LYDRGTKFGL FTPGSRIESI LMSLPLTARW EYMHSPSENS
 KEAEILEVLR HPRDWVR

Purity >95% by SDS - PAGE

Storage Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.

Concentration 1 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name CPOX coproporphyrinogen oxidase [Homo sapiens]

Official Symbol CPOX

Synonyms CPOX; coproporphyrinogen oxidase; coproporphyrinogen oxidase (coproporphyrin, harderoporphyrin) , CPO; coproporphyrinogen-III oxidase, mitochondrial; coproporphyrin; CPX; HCP; COX; coprogen oxidase; coproporphyrinogenase; CPO;

Gene ID 1371

mRNA Refseq NM_000097

Protein Refseq NP_000088

MIM 612732

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UniProt ID	P36551
Chromosome Location	3q12
Pathway	Heme Biosynthesis, organism-specific biosystem; Heme biosynthesis, organism-specific biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of porphyrins, organism-specific biosystem; Porphyrin and chlorophyll metabolism, organism-specific biosystem; Porphyrin and chlorophyll metabolism, conserved biosystem;
Function	coproporphyrinogen oxidase activity; oxidoreductase activity; protein homodimerization activity;

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