

**CPOX, 111-454aa , Human, His tag, E.coli**

**Cat.NO.: TP01699**

3th Edition

**Synonyms:**Coproporphyrinogen-III oxidase, mitochondrial precursor, CPO, CPX, HCP

**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 coproporphyrin 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 Weight:**41.6 kDa (367aa) confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHSSGLVPRGSHMGSTSLGRPEEEEEDELAHRCSSFMAPPVTDLGELRRRPGDMKTKMELLILETQA  
QVCQALAQVDGGANFSVDRWERKEGGGGISCVLQDGCVFEEKAGVSISVVHGNLSEEAQKMRSRGKVLKTKDGGK  
LPFCAMGVSSVIHPKNPHAPTIHFNYRYFEVEEADGNKQWWFGGGCDLTPTYLNQEDAVHFHRTLKEACDQHGP  
DLYPKFKKWCDDYFFIAHRGERRGIGGIFDLDSPSKEEVFRFVQSCARAVVPSYIPLVKKHCDDSFPTQEKLWQ  
QLRRGRYVEFNLLYDRGTFGLFTPGSRIESILMSLPLTARWEYMHSPSENSKEAEILEVLRHPRDWVR

**Purity:**> 95% by HPLC

**Concentration:**1 mg/ml (determined by Bradford assay)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

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