

Recombinant Human cytochrome c oxidase subunit Vb, His-tagged

Cat. No. COX5B-202H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	COX5B, 32-129aa, Human, His tag, E.coli
Species	Human
Source	E.coli
ProteinLength	32-129 a.a.
Description	Cytochrome c oxidase subunit 5B, also known as COX5B, is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. Two isoforms of COX5 exist, COX5a and COX5b. When oxygen levels within the cell are high, transcription of COX5A (the aerobic isoform) is up-regulated as the rate of cellular respiration increases. Conversely, when oxygen levels are low, COX5B (the hypoxic isoform) transcription increases and functions to maximize the turnover rate of the COX apoenzyme. Recombinant human COX5B 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 0.1M NaCl, 20% glycerol, 1mM DTT
Molecular Mass	13 kDa (121aa), confirmed by MALDI-TOF(Molecular size on SDS-PAGE will appear

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AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSASGGGVP TDEEQATGLE REIMLAACKG LDPYNVLAPK GASGTREDPN LVPSISNKRI VGCICEEDNT SVVFWLHKG EAQRCPRCGA HYKLVPQQLA H
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	0.5mg/ml (determined by Bradford assay)

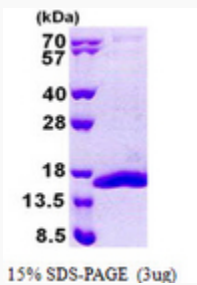
GENE INFORMATION

Gene Name	COX5B cytochrome c oxidase subunit Vb [Homo sapiens]
Official Symbol	COX5B
Synonyms	COX5B; cytochrome c oxidase subunit Vb; cytochrome c oxidase subunit 5B, mitochondrial; cytochrome c oxidase polypeptide VB, mitochondrial; COXVB;
Gene ID	1329
mRNA Refseq	NM_001862
Protein Refseq	NP_001853
MIM	123866
UniProt ID	P10606

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Chromosome Location	2q11.2
Pathway	Alzheimers disease, organism-specific biosystem; Alzheimers disease, conserved biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem; Cardiac muscle contraction, organism-specific biosystem; Cardiac muscle contraction, conserved biosystem; Cytochrome c oxidase, organism-specific biosystem; Cytochrome c oxidase, conserved biosystem;
Function	cytochrome-c oxidase activity; metal ion binding;
 (kDa) 70 57 40 28 18 13.5 8.5 15% SDS-PAGE (3ug)	