

COX5A, 42-150aa

Human, His-tagged, Recombinant, E.coli

Cat. No. IBATGP1867

Full name: cytochrome c oxidase subunit Va

NCBI Accession No.: NP_004246

Synonyms: COX, COX-VA, VA

Description: COX5A, also known as COX, COX-VA and VA, belongs to the cytochrome c oxidase subunit 5A family. Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, and the nuclear-encoded subunits may function in the regulation and assembly of the complex. COX5A is the heme A-containing chain of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport. Recombinant human COX5A 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,	(kDa) 70
10% glycerol, 2mM DTT	57
Molecular Weight: 14.9kDa (132aa), confirmed by MALDI-TOF	28
	18
Purity: > 95% by SDS - PAGE	13.5
Concentration: 1 mg/ml (determined by Bradford assay)	8.5
	15% SDS-PAGE (3ug)

Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MGSSHGSQET DEEFDARWVT YFNKPDIDAW ELRKGINTLV TYDMVPEPKI IDAALRACRR LNDFASTVRI LEVVKDKAGP HKEIYPYVIQ ELRPTLNELG ISTPEELGLD KV

General references:

Lenka N, *et al.* (1998). *Prog. Nucleic Acid Res. Mol. Biol.* 61: 309–44. Schmidt, T.R., *et al.* (2002) *Gene* 286: 13-19.

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.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.

