
Product Data Sheet

Product Name: COX5B Human
 Cat. No.: GP23207
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Cytochrome c oxidase subunit 5B; mitochondrial precursor; COXVB; COX5B; Mitochondrial; Cytochrome c oxidase polypeptide Vb.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MGSASGGGVP TDEEQATGLE REIMLAACKG LDPYNVLAPK GASGTREDPN LVPSISNKRI VGCICEEDNT SVVFWLHKG EAQRCPRCGA HYKLVPQQLA H.		
Formulation	COX5B protein solution (0.5mg/ml) containing 20mM Tris-HCl buffer (pH8.0), 0.1M NaCl, 20% glycerol and 1mM DTT.		

Introduction

Cytochrome c oxidase subunit VB (COX5B) is the terminal enzyme of the mitochondrial respiratory chain. COX5B is a multi-subunit enzyme complex which couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. There are two isoforms of COX5: COX5a and COX5b. Transcription of COX5A (the aerobic isoform) is up-regulated as the rate of cellular respiration increases, when oxygen levels within the cell are high. However, when oxygen levels are low, COX5B (the hypoxic isoform) transcription increases and functions to maximize the turnover rate of the COX apoenzyme.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

COX5B Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

chain containing 121 amino acids (32-129a.a) and having a molecular mass of 13kDa. COX5B is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA