

COX6C Blocking Peptide (C-Term)

Synthetic peptide Catalog # BP21750b

Specification

COX6C Blocking Peptide (C-Term) - Product Information

Primary Accession

P09669

COX6C Blocking Peptide (C-Term) - Additional Information

Gene ID 1345

Other Names

Cytochrome c oxidase subunit 6C, Cytochrome c oxidase polypeptide VIc, COX6C

Target/Specificity

The synthetic peptide sequence is selected from aa 54-67 of HUMAN COX6C

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

COX6C Blocking Peptide (C-Term) - Protein Information

Name COX6C

Function

Component of the cytochrome c oxidase, the last enzyme in the mitochondrial electron transport chain which drives oxidative phosphorylation. The respiratory chain contains 3 multisubunit complexes succinate dehydrogenase (complex II, CII), ubiquinol- cytochrome c oxidoreductase (cytochrome b-c1 complex, complex III, CIII) and cytochrome c oxidase (complex IV, CIV), that cooperate to transfer electrons derived from NADH and succinate to molecular oxygen, creating an electrochemical gradient over the inner membrane that drives transmembrane transport and the ATP synthase. Cytochrome c oxidase is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Electrons originating from reduced cytochrome c in the intermembrane space (IMS) are transferred via the dinuclear copper A center (CU(A)) of subunit 2 and heme A of subunit 1 to the active site in subunit 1, a binuclear center (BNC) formed by heme A3 and copper B (CU(B)). The BNC reduces molecular oxygen to 2 water molecules using 4 electrons from cytochrome c in the IMS and 4 protons from the mitochondrial matrix.

Cellular Location

Mitochondrion inner membrane; Single-pass membrane protein



COX6C Blocking Peptide (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

COX6C Blocking Peptide (C-Term) - Images

COX6C Blocking Peptide (C-Term) - Background

This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.

COX6C Blocking Peptide (C-Term) - References

Otsuka M.,et al.Nucleic Acids Res. 16:10916-10916(1988). Ohta S.,et al.Submitted (FEB-1996) to the EMBL/GenBank/DDBJ databases. Hofmann S.,et al.Cytogenet. Cell Genet. 83:226-227(1998). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004).