

COX6A1 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP9155c

Specification

COX6A1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

P12074

COX6A1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 1337

Other Names

Cytochrome c oxidase subunit 6A1, mitochondrial, Cytochrome c oxidase polypeptide VIa-liver, Cytochrome c oxidase subunit VIA-liver, COX VIa-L, COX6A1, COX6AL

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP9155c was selected from the Center region of human COX6A1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

COX6A1 Antibody (Center) Blocking Peptide - Protein Information

Name COX6A1

Synonyms COX6AL

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 unsing 4 electrons from cytochrome c in the IMS and 4 protons from the mitochondrial matrix.

Cellular Location

Mitochondrion inner membrane; Single-pass membrane protein

COX6A1 Antibody (Center) Blocking Peptide - Protocols

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

• Blocking Peptides

COX6A1 Antibody (Center) Blocking Peptide - Images

COX6A1 Antibody (Center) Blocking Peptide - Background

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

COX6A1 Antibody (Center) Blocking Peptide - References

Hochstrasser D.F., et.al., Electrophoresis 13:992-1001(1992).