

**Cox-4 Blocking Peptide**  
**Catalog # PBV10285b****Specification**

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**Cox-4 Blocking Peptide - Product Information**

Primary Accession	<a href="#">P13073</a>
Other Accession	<a href="#">EAW95436</a>
Gene ID	1327
Calculated MW	19577

**Cox-4 Blocking Peptide - Additional Information****Gene ID 1327****Application & Usage**

The peptide is used for blocking the antibody activity of active Cox-4. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30 minutes at 37°C

**Other Names**

Cytochrome c oxidase subunit 4 isoform 1, mitochondrial, Cytochrome c oxidase polypeptide IV, Cytochrome c oxidase subunit IV isoform 1, COX IV-1, COX4I1, COX4

**Target/Specificity**

Cox-4

**Formulation**

50 µg (0.2 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 0.1% BSA and 0.02% thimerosal.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

Cox-4 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

**Cox-4 Blocking Peptide - Protein Information**

**Name** COX4I1 ([HGNC:2265](#))

**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

**Tissue Location**

Ubiquitous.

**Cox-4 Blocking Peptide - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Cox-4 Blocking Peptide - Images**