

**COX6B1 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12336b**

**Specification**

---

**COX6B1 Antibody (C-term) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">P14854</a>
Other Accession	<a href="#">Q4R374</a> , <a href="#">NP_001854.1</a>
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	59-86

**COX6B1 Antibody (C-term) - Additional Information**

**Gene ID** 1340

**Other Names**

Cytochrome c oxidase subunit 6B1, Cytochrome c oxidase subunit VIb isoform 1, COX VIb-1, COX6B1, COX6B

**Target/Specificity**

This COX6B1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 59-86 amino acids from the C-terminal region of human COX6B1.

**Dilution**

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

COX6B1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**COX6B1 Antibody (C-term) - Protein Information**

**Name** COX6B1

## Synonyms COX6B

**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

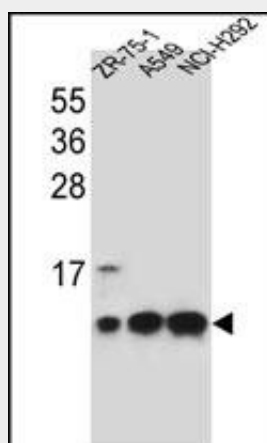
Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side

## COX6B1 Antibody (C-term) - Protocols

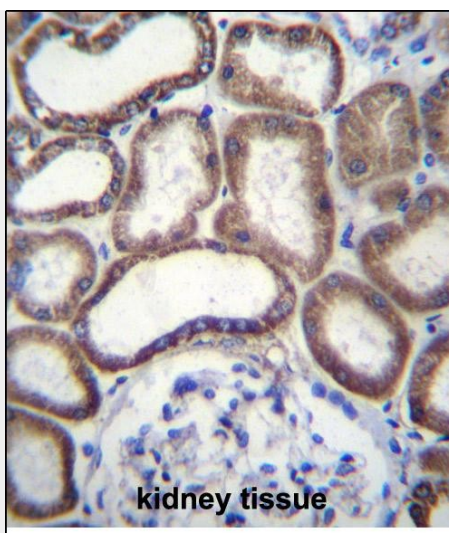
Provided below are standard protocols that you may find useful for product applications.

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

## COX6B1 Antibody (C-term) - Images



COX6B1 Antibody (C-term) (Cat. #AP12336b) western blot analysis in ZR-75-1,A549,NCI-H292 cell line lysates (35ug/lane).This demonstrates the COX6B1 antibody detected the COX6B1 protein (arrow).



COX6B1 Antibody (C-term) (Cat. #AP12336b) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of COX6B1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **COX6B1 Antibody (C-term) - Background**

Cytochrome c oxidase (COX), the terminal enzyme of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. It 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 be involved in the regulation and assembly of the complex. This nuclear gene encodes subunit VIb. Mutations in this gene are associated with severe infantile encephalomyopathy. Three pseudogenes COX6BP-1, COX6BP-2 and COX6BP-3 have been found on chromosomes 7, 17 and 22q13.1-13.2, respectively.

#### **COX6B1 Antibody (C-term) - References**

Lazarou, M., et al. FEBS J. 276(22):6701-6713(2009)  
Massa, V., et al. Am. J. Hum. Genet. 82(6):1281-1289(2008)  
Sirchia, R., et al. Biol. Chem. 388(5):457-465(2007)  
Schmidt, T.R., et al. Gene 286(1):13-19(2002)  
Taanman, J.W., et al. Hum. Genet. 87(3):325-327(1991)

#### **COX6B1 Antibody (C-term) - Citations**

- [Brown adipocyte ATF4 activation improves thermoregulation and systemic metabolism](#)