

**COX6B1 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20624a****Specification**

---

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

Application	IF, WB,E
Primary Accession	<a href="#">P14854</a>
Other Accession	<a href="#">P56391</a> , <a href="#">Q4R374</a>
Reactivity	Human
Predicted	Monkey, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	10192

**COX6B1 Antibody (N-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 a rabbit immunized with a KLH conjugated synthetic peptide between 8-22 amino acids from the N-terminal region of human COX6B1.

**Dilution**

IF~~1:25

WB~~1:1000

**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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**COX6B1 Antibody (N-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

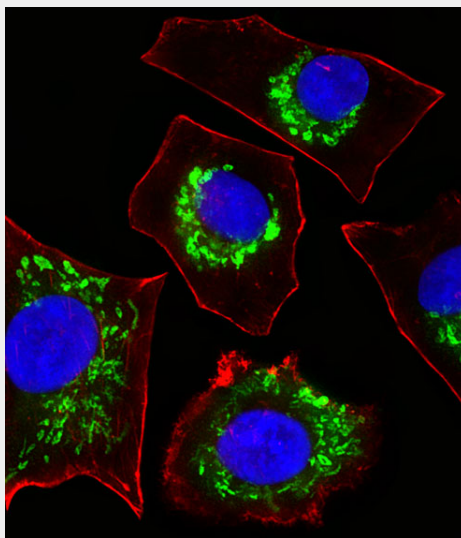
Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side

## COX6B1 Antibody (N-term) - Protocols

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

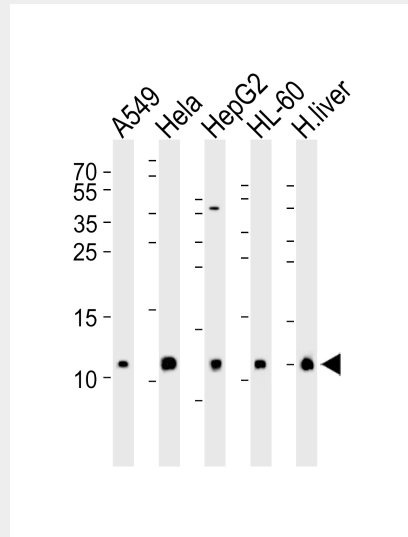
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## COX6B1 Antibody (N-term) - Images



Fluorescent image of A549 cells stained with COX6B1 Antibody (N-term)(Cat#AP20624a). AP20624a was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). DAPI was used to stain the cell

nuclear (blue). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Western blot analysis of lysates from A549, HeLa, HepG2, HL-60 cell line and human liver tissue lysate(from left to right), using COX6B1 Antibody (N-term)(Cat. #AP20624a). AP20624a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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

Connects the two COX monomers into the physiological dimeric form (By similarity).

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

Taanman J.-W.,et al.Nucleic Acids Res. 17:1766-1766(1989).  
Taanman J.-W.,et al.Gene 93:285-291(1990).  
Carrero-Valenzuela R.D.,et al.Gene 102:229-236(1991).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.

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

- [Brown adipocyte ATF4 activation improves thermoregulation and systemic metabolism](#)
- [Sympathetic inputs regulate adaptive thermogenesis in brown adipose tissue through cAMP-Salt inducible kinase axis.](#)