10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

COX6B1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20624a

Specification

COX6B1 Antibody (N-term) - Product Information

Application	**IF, WB,E**
Primary Accession	P14854
Other Accession	P56391, Q4R374
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.

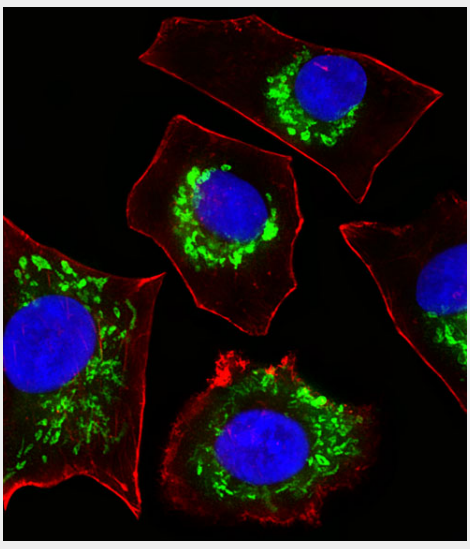
Cellular Location
Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side

COX6B1 Antibody (N-term) - Protocols

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

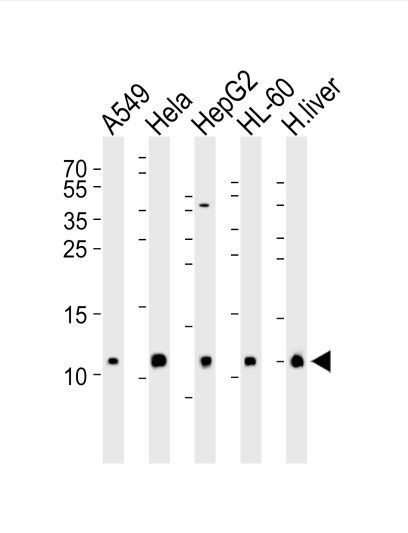
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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 lgG 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.