

COX5A Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51691**Specification**

COX5A Antibody - Product Information

Application	WB
Primary Accession	P20674
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17 KDa
Antigen Region	11 - 70

COX5A Antibody - Additional Information**Gene ID** 9377**Other Names**

Cytochrome c oxidase subunit 5A, mitochondrial, Cytochrome c oxidase polypeptide Va, COX5A

Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human COX5A. The exact sequence is proprietary.

Dilution

WB~~ 1:1000

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

COX5A Antibody - Protein Information**Name** COX5A**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

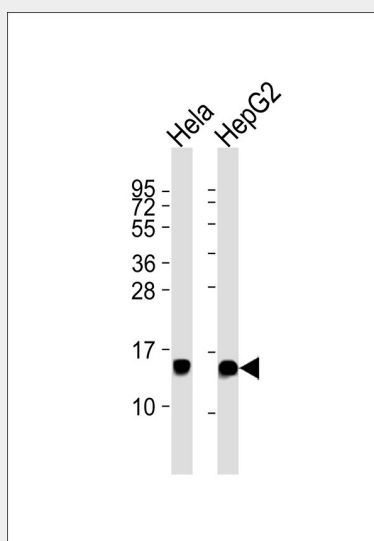
Mitochondrion inner membrane; Peripheral membrane protein; Matrix side

COX5A Antibody - 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](#)

COX5A Antibody - Images



All lanes : Anti-COX5A Antibody at 1:1000 dilution Lane 1: HeLa whole cell lysates Lane 2: HepG2 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 17 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

COX5A Antibody - Background

This is the heme A-containing chain of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.

COX5A Antibody - References

Rizzuto R., et al. Gene 69:245-256(1988).
Uddin M., et al. BMC Evol. Biol. 8:8-8(2008).
Ebert L., et al. Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.

Zody M.C.,et al.Nature 440:671-675(2006).

Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.