

COX5A Antibody
Rabbit Polyclonal Antibody
Catalog # ALS16179**Specification**

COX5A Antibody - Product Information

Application	WB, IHC
Primary Accession	P20674
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17kDa KDa

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

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

Target/Specificity

Human COX5A

Reconstitution & Storage

Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

Precautions

COX5A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

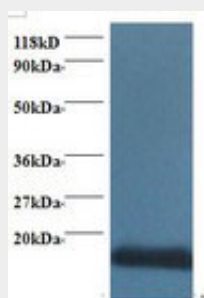
Mitochondrion inner membrane; Peripheral membrane protein; Matrix side

COX5A Antibody - Protocols

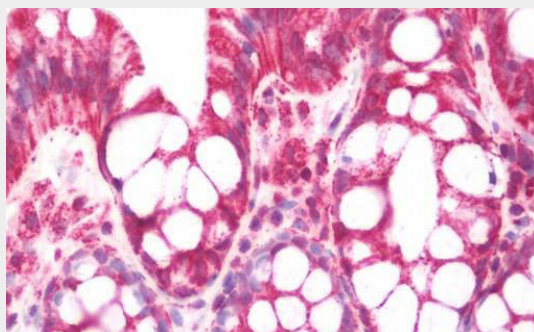
Provided below are standard protocols that you may find useful for product applications.

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

COX5A Antibody - Images



Western blot of Cytochrome c oxidase subunit 5A, mitochondrial antibody at 2 ug/ml + 293T whole...



Anti-COX5A antibody IHC staining of human colon.

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.

