

COX6A1 Antibody

Rabbit Polyclonal Antibody Catalog # ALS16180

Specification

COX6A1 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Dilution

WB, IHC-P, E
P12074
Human
Rabbit
Polyclonal
12kDa KDa
WB~~1:1000
IHC-P~~N/A
E~~N/A

COX6A1 Antibody - Additional Information

Gene ID 1337

Other Names

Cytochrome c oxidase subunit 6A1, mitochondrial, Cytochrome c oxidase polypeptide VIa-liver, Cytochrome c oxidase subunit VIA-liver, COX VIa-L, COX6A1, COX6AL

Target/Specificity

Human COX6A1

Reconstitution & Storage

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

Precautions

COX6A1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

COX6A1 Antibody - Protein Information

Name COX6A1

Synonyms COX6AL

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 unsing 4 electrons from cytochrome c in the IMS and 4 protons from the mitochondrial matrix.

Cellular Location

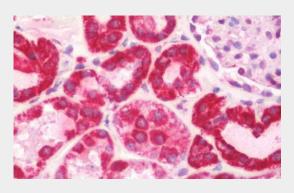
Mitochondrion inner membrane; Single-pass membrane protein

COX6A1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

COX6A1 Antibody - Images



Anti-COX6A1 antibody IHC staining of human kidney.

COX6A1 Antibody - Background

This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.

COX6A1 Antibody - References

Ota T.,et al.Nat. Genet. 36:40-45(2004). Scherer S.E.,et al.Nature 440:346-351(2006). Fabrizi G.M.,et al.Nucleic Acids Res. 17:6409-6409(1989). Hochstrasser D.F.,et al.Electrophoresis 13:992-1001(1992).