

COX4I2 Antibody (aa31-80)
Rabbit Polyclonal Antibody
Catalog # ALS15898**Specification**

COX4I2 Antibody (aa31-80) - Product Information

Application	IHC, IF, WB
Primary Accession	O96KJ9
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20kDa KDa

COX4I2 Antibody (aa31-80) - Additional Information**Gene ID** 84701**Other Names**

Cytochrome c oxidase subunit 4 isoform 2, mitochondrial, Cytochrome c oxidase subunit IV isoform 2, COX IV-2, COX4I2, COX4L2

Target/Specificity

COX42 Antibody detects endogenous levels of total COX42 protein.

Reconstitution & Storage

Store at -20°C for up to one year.

Precautions

COX4I2 Antibody (aa31-80) is for research use only and not for use in diagnostic or therapeutic procedures.

COX4I2 Antibody (aa31-80) - Protein Information**Name** COX4I2 ([HGNC:16232](#))**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 {ECO:0000250|UniProtKB:P00423}; Single-pass membrane protein {ECO:0000250|UniProtKB:P00423}

Tissue Location

Highly expressed in lung.

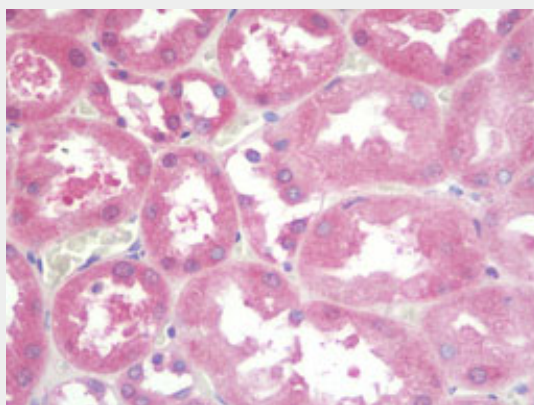
Volume

50 µl

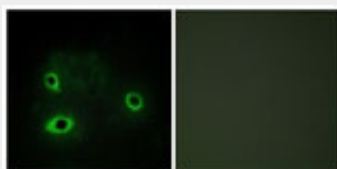
COX4I2 Antibody (aa31-80) - Protocols

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

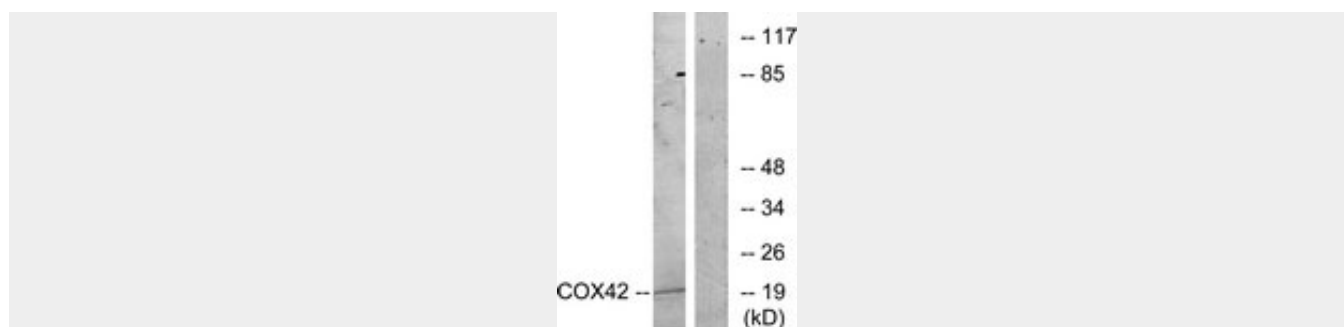
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

COX4I2 Antibody (aa31-80) - Images

Anti-COX4I2 antibody IHC staining of human kidney.



Immunofluorescence of COS7 cells, using COX4I2 Antibody.



Western blot of extracts from K562 cells, treated with insulin 0.01U/ml 15', using COX42 Antibody.

COX4I2 Antibody (aa31-80) - Background

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

COX4I2 Antibody (aa31-80) - References

Huettemann M.,et al.Gene 267:111-123(2001).
Deloukas P.,et al.Nature 414:865-871(2001).
Shteyer E.,et al.Am. J. Hum. Genet. 84:412-417(2009).