

Anti-COX IV Rabbit Monoclonal Antibody Catalog # ABO16070

Specification

Anti-COX IV Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	P13073
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-COX IV Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-COX IV Rabbit Monoclonal Antibody - Additional Information

Gene ID 1327

Other Names

Cytochrome c oxidase subunit 4 isoform 1, mitochondrial, Cytochrome c oxidase polypeptide IV, Cytochrome c oxidase subunit IV isoform 1, COX IV-1, COX4I1 ([HGNC:2265](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=2265))

Calculated MW

17 kDa KDa

Application Details

WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
IP 1:50
FC 1:50

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from COX IV

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-COX IV Rabbit Monoclonal Antibody - Protein Information

Name COX4I1 ([HGNC:2265](#))

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; Single-pass membrane protein

Tissue Location

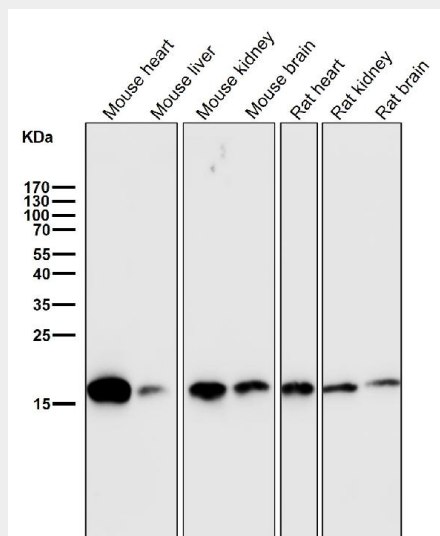
Ubiquitous.

Anti-COX IV Rabbit Monoclonal Antibody - Protocols

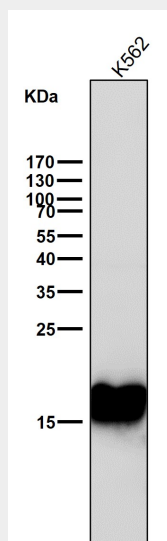
Provided below are standard protocols that you may find useful for product applications.

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

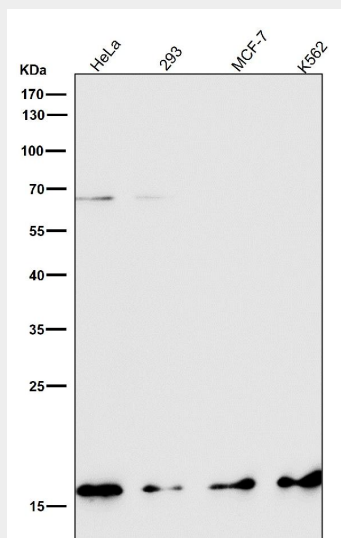
Anti-COX IV Rabbit Monoclonal Antibody - Images



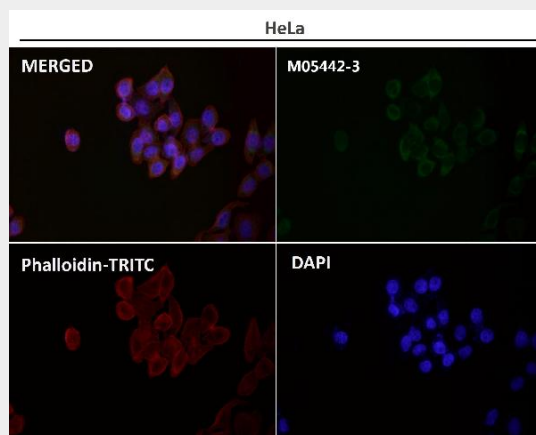
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



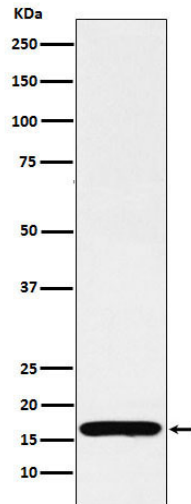
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



Immunofluorescent analysis using the Antibody at 1:500 dilution.



Western blot analysis of COX IV expression in HepG2 cell lysate.