

**DATASHEET**

**COX4-1 Mouse Monoclonal Antibody(C2112)**

CAT. NO. AMA01724

**KEY FEATURES**

Target	COX4-1	Source / Host	Mouse
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

**BACKGROUND**

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.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:1000 - 1:3000
IF/ICC	1:100 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Mouse monoclonal antibody to COX4-1
Specificity	Recognizes endogenous levels of COX4-1 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant protein corresponding to human COX4-1.
Purification	Affinity chromatography
Molecular Weight	Predicted: 19 kD; Observed: 15 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	COX4; Cytochrome c oxidase subunit 4 isoform 1 mitochondrial; Cytochrome c oxidase polypeptide IV; Cytochrome c oxidase subunit IV isoform 1; COX IV-1
Gene Symbol	COX4I1
Entrez Gene	1327(Human); 12857(Mouse); 29445(Rat)
SwissProt	P13073(Human); P19783(Mouse); P10888(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

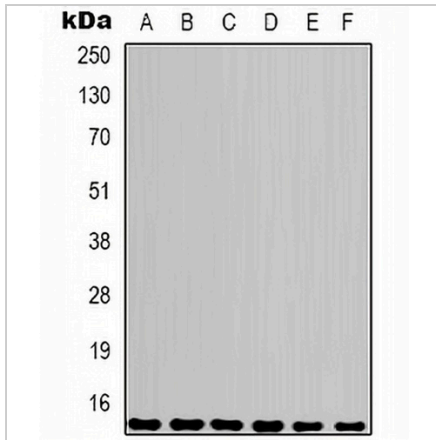
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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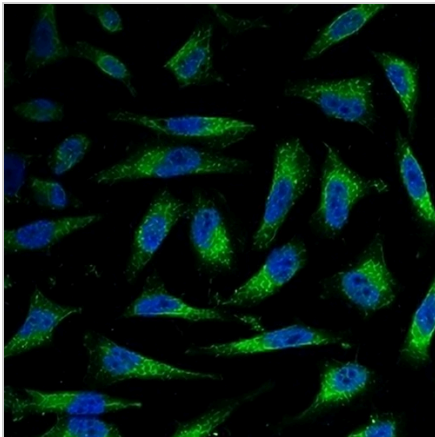
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Western blot analysis of COX4-1 expression in Hela (A), HepG2 (B), 293T (C), mouse heart (D), mouse muscle (E), rat heart (F) whole cell lysates. (Predicted band size: 19 kD; Observed band size: 15 kD)



Immunofluorescent analysis of COX4-1 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a FITC-conjugated secondary antibody (green) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.