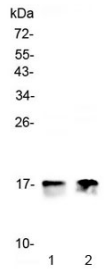
COX4I1 Antibody / COX IV-1 (RQ4432)

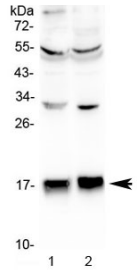
Catalog No.	Formulation	Size
RQ4432	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

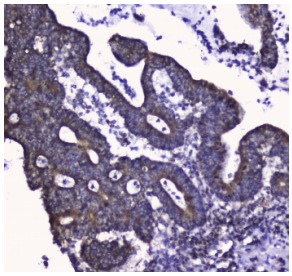
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P13073
Localization	Cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml Immunofluorescence: 2-4ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml (recombinant human protein) (BSA-free format available)
Limitations	This COX4I1 antibody is available for research use only.



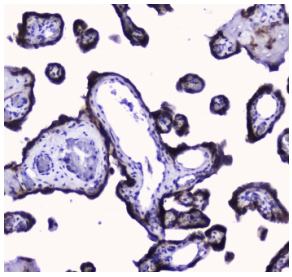
Western blot testing of 1) rat heart and 2) mouse heart lysate with COX4I1 antibody at 0.5ug/ml. Predicted molecular weight ~20 kDa.



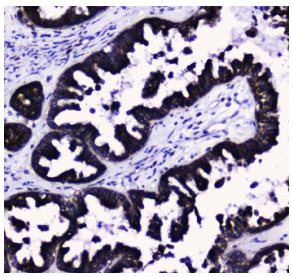
Western blot testing of human 1) HepG2 and 2) SGC-7901 lysate with COX4I1 antibody at 0.5ug/ml. Predicted molecular weight ~20 kDa.



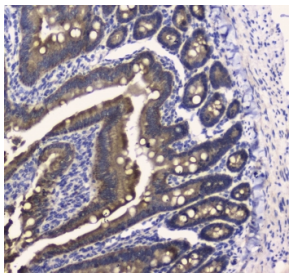
IHC testing of FFPE human intestinal cancer tissue with COX4I1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



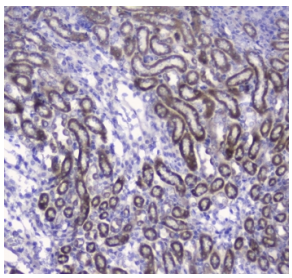
IHC testing of FFPE human placental tissue with COX4I1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



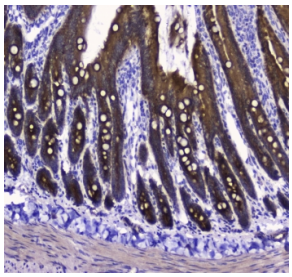
IHC testing of FFPE human thyroid cancer tissue with COX4I1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



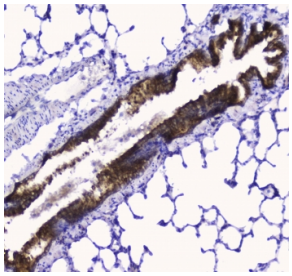
IHC testing of FFPE mouse small intestine tissue with COX4I1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



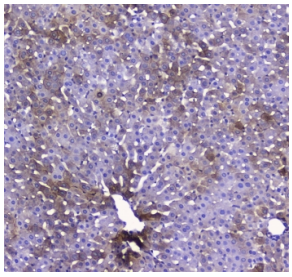
IHC testing of FFPE mouse kidney tissue with COX4I1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



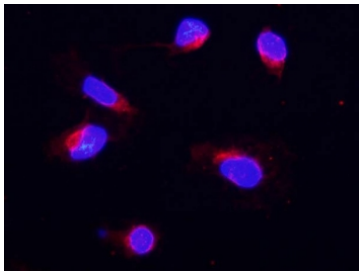
IHC testing of FFPE rat small intestine tissue with COX4I1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



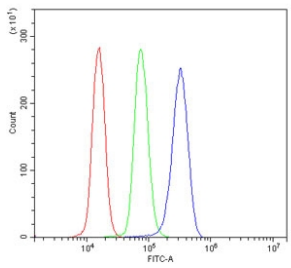
IHC testing of FFPE rat lung tissue with COX4I1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IHC testing of FFPE rat liver tissue with COX4I1 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Immunofluorescent staining of FFPE human U-2 OS cells with COX4I1 antibody (red) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human U937 cells with COX4I1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= COX4I1 antibody.

Description

Cytochrome c oxidase subunit 4 isoform 1, mitochondrial is an enzyme that in humans is encoded by the COX4I1 gene. Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. The complex consists of 13 mitochondrial- and nuclear-encoded subunits. The mitochondrially-encoded subunits perform the electron transfer and proton pumping activities. The functions of the nuclear-encoded subunits are unknown but they may play a role in the regulation and assembly of the complex. This gene encodes the nuclear-encoded subunit IV isoform 1 of the human mitochondrial respiratory chain enzyme. It is located at the 3' of the NOC4 (neighbor of COX4) gene in a head-to-head orientation, and

shares a promoter with it. Pseudogenes related to this gene are located on chromosomes 13 and 14.

Application Notes

Optimal dilution of the COX4I1 antibody should be determined by the researcher.

Immunogen

A human partial recombinant protein corresponding to amino acids Q59-K169 was used as the immunogen for the COX4I1 antibody.

Storage

After reconstitution, the COX4I1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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