

Datasheet for ABIN2775574  
**anti-COX IV antibody (N-Term)**

6 Images

3 Publications

[Go to Product page](#)

## Overview

Quantity:	100 µL
Target:	COX IV (COX4I1)
Binding Specificity:	N-Term
Reactivity:	Human, Rat, Mouse, Dog, Cow, Guinea Pig, Horse, Rabbit
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This COX IV antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

## Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N terminal region of human COX4I1
Sequence:	AISTSVCVRA HESVVKSEDF SLPAYMDRRD HPLPEVAHVK HLSASQKALK
Predicted Reactivity:	Cow: 86%, Dog: 86%, Guinea Pig: 86%, Horse: 86%, Human: 100%, Mouse: 85%, Rabbit: 86%, Rat: 86%
Characteristics:	This is a rabbit polyclonal antibody against COX4I1. It was validated on Western Blot and immunohistochemistry.
Purification:	Protein A purified

## Target Details

Target:	COX IV (COX4I1)
---------	-----------------

## Target Details

Alternative Name: COX4I1 ([COX4I1 Products](#))

Background: 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. COX4I1 is the nuclear-encoded subunit IV isoform 1 of the human mitochondrial respiratory chain enzyme. 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.

Alias Symbols: COX4, COXIV, MGC72016, COX4-1

Protein Interaction Partner: SDCBP, COX1, env, APP, UBC, ICT1, TMBIM4, NELFCD,

Protein Size: 169

Molecular Weight: 19 kDa

Gene ID: 1327

NCBI Accession: [NM\\_001861](#), [NP\\_001852](#)

UniProt: [P13073](#)

Pathways: [Proton Transport](#)

## Application Details

Application Notes: Optimal working dilutions should be determined experimentally by the investigator.

Comment: Antigen size: 169 AA

Restrictions: For Research Use only

## Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

## Publications

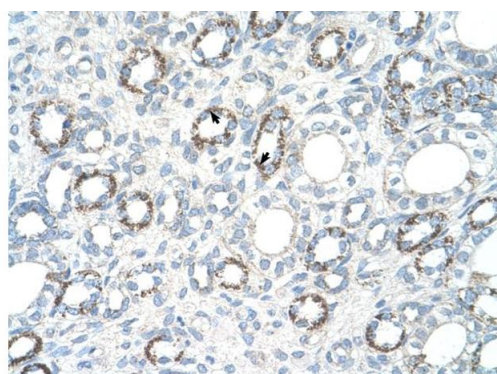
Product cited in:	Yang, Kitamura, Wu, Chang, Ling, Kuo: "Tooth Germ-Like Construct Transplantation for Whole-Tooth Regeneration: An In Vivo Study in the Miniature Pig." in: <b>Artificial organs</b> , Vol. 40, Issue 4, pp. E39-50, (2016) ( <a href="#">PubMed</a> ).
-------------------	--

## Images



### Western Blotting

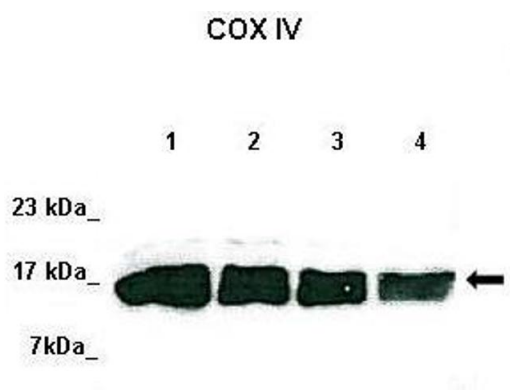
**Image 1.** WB Suggested Anti-COX4I1 Antibody Titration: 1.25ug/ml Positive Control: HepG2 cell lysate COX4I1 is strongly supported by BioGPS gene expression data to be expressed in Human HepG2 cells



Rabbit Anti-COX4I1 Antibody  
Catalog Number: ARP42784  
Lot Number: QC12117  
Paraffin Embedded Tissue: Human Kidney  
Cells with Positive label: Epithelial cells of renal tubule (Indicated with Arrows)  
Antibody Concentration: 2.0 µg/ml  
Magnification: 400X

## Immunohistochemistry

**Image 2.** Human kidney



See Immunoblot 3 Data and Customer Feedback  
for more Information

## Western Blotting

**Image 3.** Lanes: Lane 1: 50ug HeLa lysate Lane 2: 50ug 293T lysate Lane 3: 50ug K562 lysate Lane 4: 50ug MDA-MB-231 lysate Primary Antibody Dilution: 1:1000 Secondary Antibody Dilution: 1:1000 Gene Name: COX4I1 Submitted by: David Colecchia, Ph.D, Istituto Toscano Tumori, Core Research Laboratory, presso Fondazione Toscana Life Sciences

Please check the [product details page](#) for more images. Overall 6 images are available for ABIN2775574.