

## Product datasheet for TA356212

### COX4 (COX4I1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, IP, WB
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The immunogen is a synthetic peptide directed towards the N terminal region of human COX4I1
Specificity:	<b>Expected reactivity:</b> Cow, Dog, Guinea Pig, Horse, Human, Mouse, Rabbit, Rat <b>Homology:</b> Cow: 86%; Dog: 86%; Guinea Pig: 86%; Horse: 86%; Human: 100%; Mouse: 85%; Rabbit: 86%; Rat: 86%
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Concentration:	lot specific
Purification:	Protein A purified
Conjugation:	Unconjugated
Storage:	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.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	19kDa
Gene Name:	cytochrome c oxidase subunit 4I1
Database Link:	<a href="#">NP_001852</a> <a href="#">Entrez Gene 1327 Human</a> <a href="#">P13073</a>



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**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.

**Synonyms:**

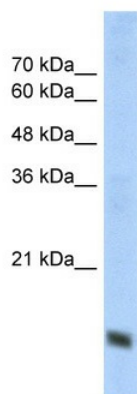
COX4; COXIV; MGC72016

**Protein Families:**

Transmembrane

**Protein Pathways:**

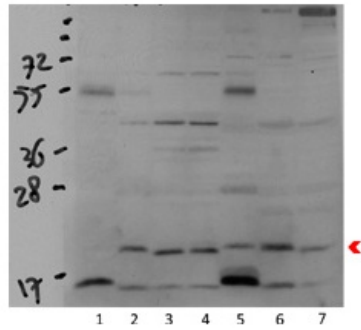
Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

**Product images:**

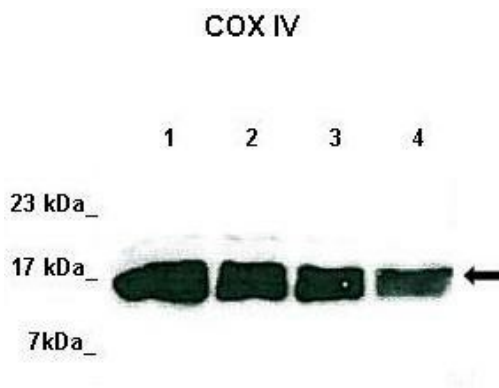
WB Suggested Anti-COX4I1 Antibody Titration:

1.25ug/ml

Positive Control: HepG2 cell lysate COX4I1 is strongly supported by BioGPS gene expression data to be expressed in Human HepG2 cells



COX4I1 antibody - N-terminal region (TA356212) validated by WB using 1. Human liver  
 2. Rat liver  
 3. Wild-type mouse liver  
 4. AMPKa1+2-/- mouse liver  
 5. Human muscle  
 6. Rat muscle  
 7. Mouse muscle at 1:1000.



See Immunoblot 3 Data and Customer Feedback for more Information

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:  
 Anti-rabbit-HRP

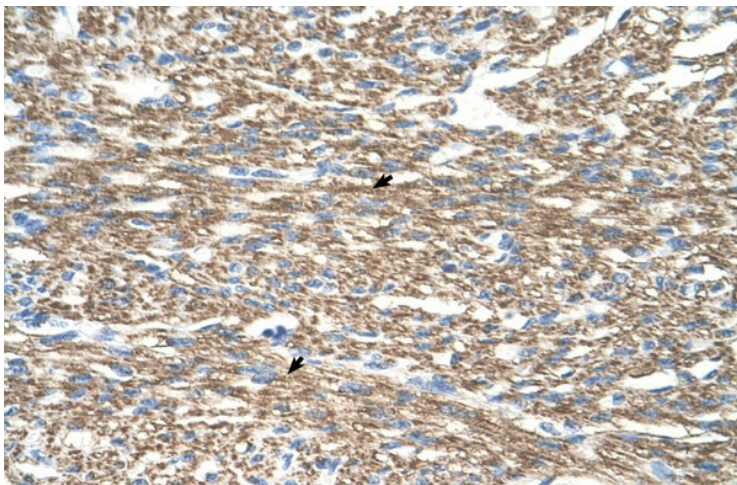
Secondary Antibody Dilution:  
 1:1000

Gene Name:

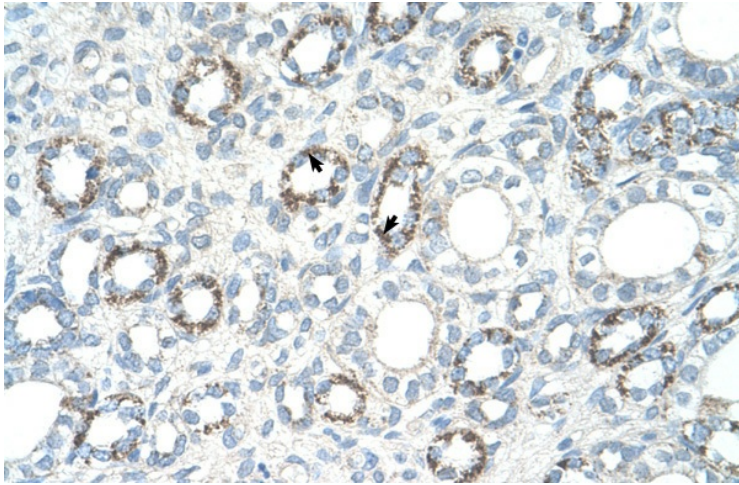
COX4I1

Submitted by:

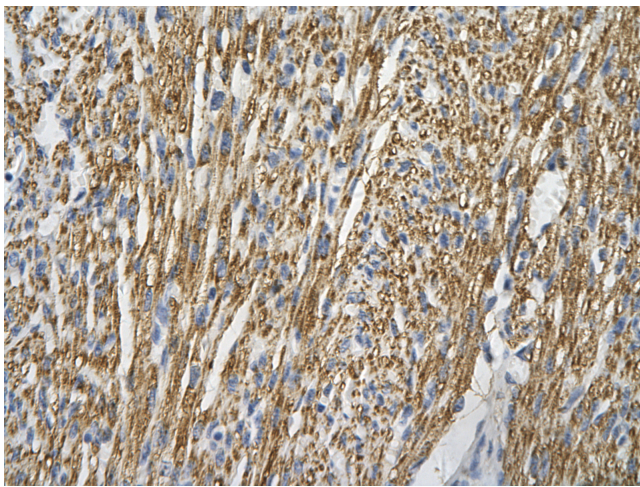
David Colecchia, Ph.D, Istituto Toscano Tumori,  
 Core Research Laboratory, presso Fondazione  
 Toscana Life Sciences



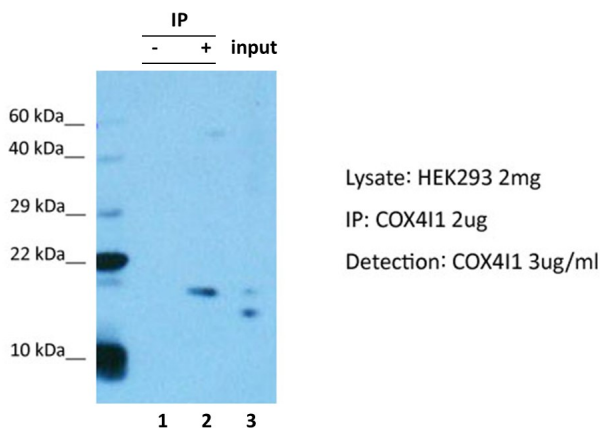
Human Heart



Human kidney



Rabbit Anti-COX4I1 Antibody  
 Catalog Number: ARP42784  
 Paraffin Embedded Tissue: Human cardiac cell  
 Cellular Data: Epithelial cells of renal tubule  
 Antibody Concentration: 4.0-8.0 ug/ml  
 Magnification: 400X



COX4I1 was immunoprecipitated from 2 mg HEK293 Whole Cell Lysate with TA356212 with 1:200 dilution. Western blot was performed using TA356212 at 1/1000 dilution.  
 Lane 1: Control IP in HEK293 Whole Cell Lysate.  
 Lane 2: COX4I1 IP with TA356212 in HEK293 Whole Cell Lysate.  
 Lane 3: Input of HEK293 Whole Cell Lysate.