

Datasheet for ABIN3042632  
**anti-COX1 antibody (N-Term)**

## 9 Images

[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	COX1
Binding Specificity:	AA 2-14, N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This COX1 antibody is un-conjugated
Application:	Western Blotting (WB)

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for Cytochrome c oxidase subunit 1(MT-CO1) detection. Tested with WB in Human.
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human MTCO1(2-14aa FADRWLFSTNHKD).
Sequence:	FADRWLFSTN HKD
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for Cytochrome c oxidase subunit 1(MT-CO1) detection. Tested with WB in Human.</p> <p>Gene Name: mitochondrially encoded cytochrome c oxidase I</p> <p>Protein Name: Cytochrome c oxidase subunit 1</p>

## Product Details

Purification: Immunogen affinity purified.

## Target Details

Target: COX1

Alternative Name: MT-CO1 ([COX1 Products](#))

Background: Cytochrome c oxidase subunit I(CO1 or MTCO1) is 1 of 3 mitochondrial DNA(mtDNA) encoded subunits(MTCO1, MTCO2, MTCO3) of respiratory Complex IV. Complex IV is located within the mitochondrial inner membrane and is the third and final enzyme of the electron transport chain of mitochondrial oxidative phosphorylation. It is composed of 13 polypeptides. Subunits I, II, and III(MTCO1, MTCO2, MTCO3) are encoded by mtDNA while subunits IV, Va, Vb, VIa, VIb, VIc, VIIa, VIIb, VIIc, and VIII are nuclear encoded. The cytochrome c oxidase family of enzymes have 4 redox centers, 2 hemes and 2 copper centers. In mitochondrial Complex IV, the 2 hemes are a and a3 and the 2 coppers are CuA and CuB. The 2 hemes and CuB are bound to subunit I. Acin-Perez et al.(2003) identified a cell line containing single and double missense mutations in the cytochrome c oxidase(COX) subunit I gene of mouse mitochondrial DNA. And they hypothesized that deleterious mutations can arise and become predominant, cultured cells can maintain several mtDNA haplotypes at stable frequencies, the respiratory chain has little spare COX capacity, and that the size of a cavity in the vicinity of val421 in MTCO1I of animal COX may affect the function of the enzyme.

Synonyms: COI antibody|COX I antibody|COX1\_HUMAN antibody|COXI antibody|Cytochrome c oxidase polypeptide I antibody|Cytochrome c oxidase subunit 1 antibody|Cytochrome C Oxidase subunit I antibody|Mitochondrially encoded cytochrome c oxidase I antibody|MT CO1 antibody|MT-CO1 antibody|MTCO 1 antibody|MTCO1 antibody

UniProt: [P00395](#)

Pathways: [Proton Transport](#)

## Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human  
Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities.  
Other applications have not been tested. Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

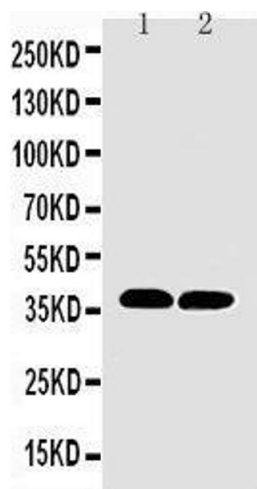
## Application Details

Restrictions: For Research Use only

## Handling

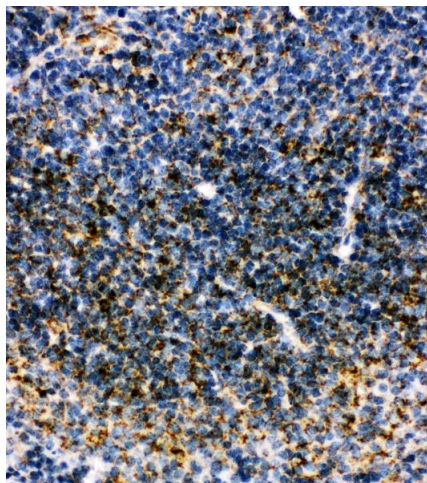
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg Thimerosal, 0.05 mg Sodium azide.
Preservative:	Thimerosal (Merthiolate), Sodium azide
Precaution of Use:	This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Expiry Date:	12 months

## Images



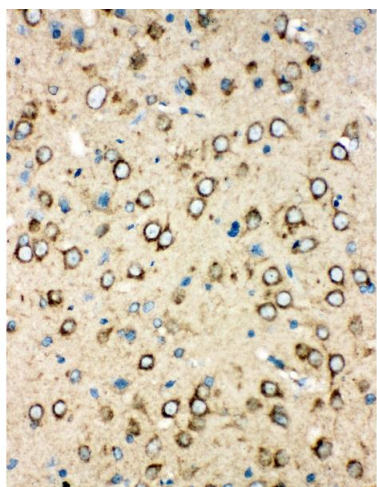
### Western Blotting

**Image 1.** Anti-MTCO1 antibody, Western blotting Lane 1: Rat Heart Tissue Lysate Lane 2: Mouse Heart Tissue Lysate



#### Immunohistochemistry

**Image 2.** Anti-MTCO1 antibody, IHC(P) IHC(P): Mouse Spleen Tissue



#### Immunohistochemistry

**Image 3.** Anti-MTCO1 antibody, IHC(P) IHC(P): Rat Brain Tissue

Please check the [product details page](#) for more images. Overall 9 images are available for ABIN3042632.