

# COX3 antibody - C-terminal region

Rabbit Polyclonal Antibody  
Catalog # AI13154

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">P00414</a>
<b>Other Accession</b>	<a href="#">P00414</a> , <a href="#">NP_536849</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	29951

## Additional Information

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<b>Gene ID</b>	4514
<b>Alias Symbol</b>	MTCO3, COIII
<b>Other Names</b>	Cytochrome c oxidase subunit 3, Cytochrome c oxidase polypeptide III, MT-CO3, COIII, COXIII, MTCO3
<b>Format</b>	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
<b>Reconstitution &amp; Storage</b>	Add 50 ul of distilled water. Final anti-COX3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
<b>Precautions</b>	COX3 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	MT-CO3
<b>Synonyms</b>	COIII, COXIII, MTCO3
<b>Function</b>	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

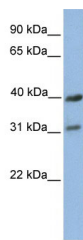
the ATP synthase. Cytochrome c oxidase is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Electrons originating from reduced cytochrome c in the intermembrane space (IMS) are transferred via the dinuclear copper A center (CU(A)) of subunit 2 and heme A of subunit 1 to the active site in subunit 1, a binuclear center (BNC) formed by heme A3 and copper B (CU(B)). The BNC reduces molecular oxygen to 2 water molecules using 4 electrons from cytochrome c in the IMS and 4 protons from the mitochondrial matrix.

#### Cellular Location

Mitochondrion inner membrane; Multi-pass membrane protein

#### Images

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WB Suggested Anti-COX3 Antibody Titration: 0.2-1  $\mu\text{g/ml}$   
Positive Control: 721\_B cell lysate

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.