

COX3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58112

Specification

COX3 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC-P, IHC-F, IF, E <u>P00414</u> Rat, Pig, Dog, Bovine Rabbit Polyclonal 29951

COX3 Polyclonal Antibody - Additional Information

Gene ID 4514

Other Names Cytochrome c oxidase subunit 3, 7.1.1.9, Cytochrome c oxidase polypeptide III, MT-CO3, COIII, COXIII, MTCO3

Dilution WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

COX3 Polyclonal Antibody - Protein Information

Name MT-CO3

Synonyms COIII, COXIII, MTCO3

Function

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

COX3 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

COX3 Polyclonal Antibody - Images



Sample:

kidney(mouse)Lysate at 40 ug Primary: Anti- COX3 (bs-3934R)at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 30kD Observed band size: 30 kD