

COQ3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8765C

Specification

COQ3 Antibody (Center) - Product Information

Application WB, IHC-P, FC,E

Primary Accession 09NZI6 Other Accession O3T131 Reactivity Human Predicted **Bovine** Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 41054 Antigen Region 172-201

COQ3 Antibody (Center) - Additional Information

Gene ID 51805

Other Names

Hexaprenyldihydroxybenzoate methyltransferase, mitochondrial, 2-polyprenyl-6-hydroxyphenol methylase, 4-dihydroxy-5-hexaprenylbenzoate methyltransferase, DHHB methyltransferase, DHHB-MTase, 3-demethylubiquinone-10 3-methyltransferase, Dihydroxyhexaprenylbenzoate methyltransferase, COQ3

Target/Specificity

This COQ3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 172-201 amino acids from the Central region of human COQ3.

Dilution

WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

COQ3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

COQ3 Antibody (Center) - Protein Information



Name COQ3 {ECO:0000255|HAMAP-Rule:MF 03190}

Function O-methyltransferase that catalyzes the 2 O-methylation steps in the ubiquinone biosynthetic pathway.

Cellular Location

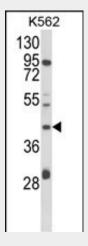
Mitochondrion inner membrane {ECO:0000255|HAMAP- Rule:MF_03190}; Peripheral membrane protein {ECO:0000255|HAMAP- Rule:MF_03190}; Matrix side {ECO:0000255|HAMAP-Rule:MF_03190}

COQ3 Antibody (Center) - Protocols

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

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

COQ3 Antibody (Center) - Images

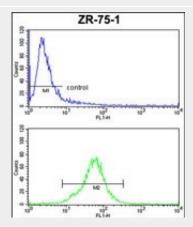


Western blot analysis of COQ3 Antibody (Center) (Cat. #AP8765c) in K562 cell line lysates (35ug/lane). COQ3 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human skeletal muscle reacted with COQ3 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



COQ3 Antibody (Center) (Cat.#AP8765c) FC analysis of ZR-75-1 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

COQ3 Antibody (Center) - Background

Ubiquinone, also known as coenzyme Q, or Q, is a critical component of the electron transport pathways of both eukaryotes and prokaryotes (Jonassen and Clarke, 2000 [PubMed 10777520]). This lipid consists of a hydrophobic isoprenoid tail and a quinone head group. The tail varies in length depending on the organism, but its purpose is to anchor coenzyme Q to the membrane. The quinone head group is responsible for the activity of coenzyme Q in the respiratory chain. COQ3 is an O-methyltransferase required for 2 steps in the biosynthetic pathway of coenzyme Q. This enzyme methylates an early coenzyme Q intermediate, 3,4-dihydroxy-5-polyprenylbenzoic acid, as well as the final intermediate in the pathway, converting demethyl-ubiquinone to coenzyme Q. The COQ3 is also capable of methylating the distinct prokaryotic early intermediate 2-hydroxy-6-polyprenyl phenol.

COQ3 Antibody (Center) - References

Olsen, J.V., et.al., Cell 127 (3), 635-648 (2006)