

COQ3 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP8765c

Specification

COQ3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

COQ3 Antibody (Center) Blocking Peptide - 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

Q9NZI6

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP8765c was selected from the Center region of human COQ3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

COQ3 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols

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

• Blocking Peptides

COQ3 Antibody (Center) Blocking Peptide - Images

COQ3 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - References

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