

COQ2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55367

Specification

COQ2 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	O96H96
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40475

COQ2 Polyclonal Antibody - Additional Information

Gene ID 27235

Other Names

4-hydroxybenzoate polyprenyltransferase, mitochondrial {ECO:0000255|HAMAP-Rule:MF_03189}, 4-HB polyprenyltransferase {ECO:0000255|HAMAP-Rule:MF_03189}, 2.5.1.39 {ECO:0000255|HAMAP-Rule:MF_03189, ECO:0000269|PubMed:15153069, ECO:0000269|PubMed:16400613, ECO:0000269|PubMed:17374725}, 4-hydroxybenzoate decaprenyltransferase {ECO:0000255|HAMAP-Rule:MF_03189}, COQ2 homolog, hCOQ2, Para-hydroxybenzoate--polyprenyltransferase {ECO:0000255|HAMAP-Rule:MF_03189}, PHB:PPT {ECO:0000255|HAMAP-Rule:MF_03189}, PHB:polyprenyltransferase {ECO:0000255|HAMAP-Rule:MF_03189}, COQ2 {ECO:0000255|HAMAP-Rule:MF_03189}, CL640

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.

COQ2 Polyclonal Antibody - Protein Information

Name COQ2 {ECO:0000255|HAMAP-Rule:MF_03189}

Synonyms CL640

Function

Mediates the second step in the final reaction sequence of coenzyme Q (CoQ) biosynthesis (PubMed:15153069, PubMed:16400613, PubMed:17374725, PubMed:20526342). Catalyzes the prenylation of para- hydroxybenzoate (PHB) with an all-trans polyprenyl donor (such as all- trans-decaprenyl diphosphate) (PubMed:<a

<http://www.uniprot.org/citations/15153069> target="_blank">15153069, PubMed:16400613, PubMed:17374725, PubMed:20526342). The length of the polyprenyl side chain varies depending on the species, in humans, the side chain is comprised of 10 isoprenyls (decaprenyl) producing CoQ10 (also known as ubiquinone), whereas rodents predominantly generate CoQ9 (PubMed:15153069, PubMed:16400613). However, this specificity is not complete, human tissues have low amounts of CoQ9 and rodent organs contain some CoQ10 (PubMed:15153069). Plays a central role in the biosynthesis of CoQ10 (PubMed:15153069, PubMed:16400613, PubMed:17374725). CoQ10 is a vital molecule that transports electrons from mitochondrial respiratory chain complexes (PubMed:16400613, PubMed:17374725, PubMed:27493029). CoQs also function as cofactors for uncoupling protein and play a role as regulators of the extracellularly-induced ceramide-dependent apoptotic pathway (PubMed:16400613, PubMed:17374725). Regulates mitochondrial permeability transition pore (mPTP) opening and ROS production (pivotal events in cell death) in a tissue specific manner (By similarity).

Cellular Location

Mitochondrion inner membrane {ECO:0000255|HAMAP- Rule:MF_03189, ECO:0000269|PubMed:27493029}; Multi-pass membrane protein {ECO:0000255|HAMAP-Rule:MF_03189}; Matrix side {ECO:0000255|HAMAP-Rule:MF_03189}

Tissue Location

Widely expressed. Present in all of the tissues tested. Expressed at higher level in skeletal muscle, adrenal glands and the heart.

COQ2 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

COQ2 Polyclonal Antibody - Images