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COQ2 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI12752

Product Information

Application	WB
Primary Accession	Q96H96
Other Accession	NM_015697, NP_056512
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Dog, Horse, Yeast
Predicted	Human, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40475

Additional Information

Gene ID	27235
Alias Symbol	CL640, FLJ26072
Other Names	4-hydroxybenzoate polyprenyltransferase, mitochondrial, 2.5.1.39, COQ2 homolog, hCOQ2, Para-hydroxybenzoate--polyprenyltransferase, PHB:polyprenyltransferase, COQ2, CL640
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-COQ2 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.
Precautions	COQ2 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

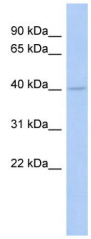
Name	COQ2 {ECO:0000255|HAMAP-Rule:MF_03189, ECO:0000303|PubMed:15153069}
Function	Mediates the second step in the final reaction sequence of coenzyme Q (CoQ) biosynthesis (PubMed:15153069, PubMed:16400613, PubMed:17374725, PubMed:20526342). Catalyzes the prenylation of para-hydroxybenzoate (PHB) with an all-trans polyprenyl donor (such as all-trans-decaprenyl diphosphate) (PubMed: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.

References

Brown,M.A.,(2007)J.Am.Soc.Nephrol.18(10),2773-2780ReconstitutionandStorage:Forshorttermuse,storeat2-8Cupto1week.Forlongtermstorage,storeat-20Cinsmallaliquotstopreventfreeze-thawcycles.

Images



WB Suggested Anti-COQ2 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:12500
Positive Control: DU145 cell lysate
COQ2 is supported by BioGPS gene expression data to be expressed in DU145

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