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COQ2 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI12752

Specification

COQ2 antibody - middle region - Product Information

Application	**WB**
Primary Accession	Q96H96
Other Accession	NM_015697, NP_056512
Reactivity	**Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Horse, Yeast, Dog**
Predicted	**Human, Pig, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**42kDa KDa**

COQ2 antibody - middle region - 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.

COQ2 antibody - middle region - 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:17374725, PubMed:16400613, PubMed:20526342).

Catalyzes the prenylation of para- hydroxybenzoate (PHB) with an all-trans polyprenyl donor (such as all- trans-decaprenyl diphosphate) (PubMed:15153069, PubMed:17374725, PubMed:16400613, 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:17374725, PubMed:16400613). CoQ10 is a vital molecule that transports electrons from mitochondrial respiratory chain complexes (PubMed:17374725, PubMed:27493029, PubMed:16400613). CoQs also function as cofactors for uncoupling protein and play a role as regulators of the extracellularly-induced ceramide-dependent apoptotic pathway (PubMed:17374725, PubMed:16400613). 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.

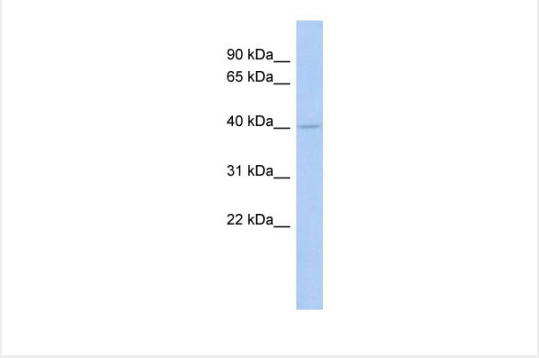
COQ2 antibody - middle region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

COQ2 antibody - middle region - Images

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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

COQ2 antibody - middle region - References

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