10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

COQ9 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4890c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O75208
Other Accession	Q68FT1, Q8K1Z0
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB25014
Calculated MW	35509
Antigen Region	156-184

Additional Information

Gene ID	57017
Other Names	Ubiquinone biosynthesis protein COQ9, mitochondrial, COQ9, C16orf49
Target/Specificity	This COQ9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 156-184 amino acids from the Central region of human COQ9.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
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	COQ9 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	COQ9 (HGNC:25302)
Synonyms	C16orf49

Function	Membrane-associated protein that warps the membrane surface to access and bind aromatic isoprenes with high specificity, including ubiquinone (CoQ) isoprene intermediates and presents them directly to COQ7, therefore facilitating the COQ7-mediated hydroxylase step (PubMed:25339443, PubMed:30661980, PubMed:38425362). Participates in the biosynthesis of coenzyme Q, also named ubiquinone, an essential lipid-soluble electron transporter for aerobic cellular respiration (PubMed:25339443, PubMed:30661980).
Cellular Location	Mitochondrion {ECO:0000250|UniProtKB:Q8K1Z0}. Note=Associates with cardiolipin-rich membranes which leads to the lipid bilayer deformation and then accessing to membrane-bound lipids

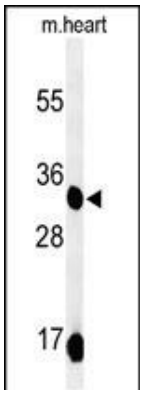
Background

Coenzyme Q10 (CoQ10), or ubiquinone, is a mobile lipophilic electron carrier critical for electron transfer by the mitochondrial inner membrane respiratory chain. COQ9 is 1 of several enzymes involved in biosynthesis of CoQ10 and likely functions in modification of the benzoquinone ring.

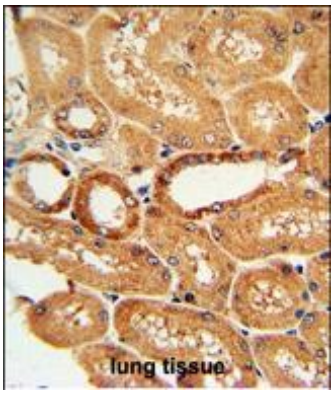
References

Duncan, A.J., et al. Am. J. Hum. Genet. 84(5):558-566(2009)
Loftus, B.J., et al. Genomics 60(3):295-308(1999)

Images

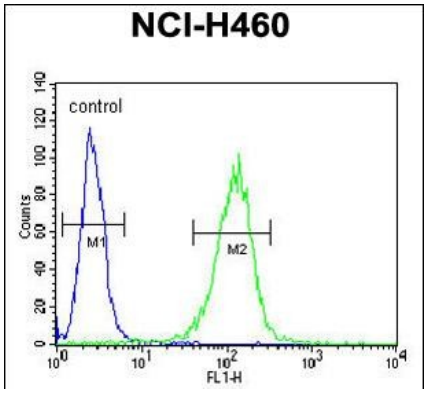


Western blot analysis of COQ9 Antibody (Center) (Cat. #AP4890c) in mouse heart tissue lysates (35ug/lane). COQ9 (arrow) was detected using the purified Pab.



COQ9 Antibody (Center) (Cat. #AP4890c) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the COQ9 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

COQ9 Antibody (Center) (Cat. #AP4890c) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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