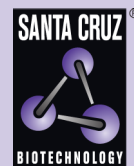


COQ6 (H-1): sc-393932



The Power to Question

BACKGROUND

Coenzyme Q (CoQ), also referred to as ubiquinone, is a fat-soluble component of the electron transport chain that participates in aerobic cellular respiration within mitochondria and is essential for ATP-dependent energy production. CoQ consists of a hydrophobic isoprenoid tail, which anchors it to the membrane, and a quinone head group, which is responsible for the activity of CoQ in the respiratory chain. CoQ biosynthesis requires the formation of a multi-subunit enzyme complex, composed of COQ1 through COQ10, which is highly characterized in yeast. Specifically, COQ6 encodes a flavin-dependent monooxygenase essential for coenzyme Q biosynthesis in yeast. In humans, COQ6 is a 468 amino acid protein whose function is not fully elucidated.

CHROMOSOMAL LOCATION

Genetic locus: COQ6 (human) mapping to 14q24.3; Coq6 (mouse) mapping to 12 D1.

SOURCE

COQ6 (H-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 130-155 within an internal region of COQ6 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

COQ6 (H-1) is available conjugated to agarose (sc-393932 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393932 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393932 PE), fluorescein (sc-393932 FITC), Alexa Fluor® 488 (sc-393932 AF488), Alexa Fluor® 546 (sc-393932 AF546), Alexa Fluor® 594 (sc-393932 AF594) or Alexa Fluor® 647 (sc-393932 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393932 AF680) or Alexa Fluor® 790 (sc-393932 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393932 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

COQ6 (H-1) is recommended for detection of COQ6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

COQ6 (H-1) is also recommended for detection of COQ6 in additional species, including equine, canine, bovine and porcine.

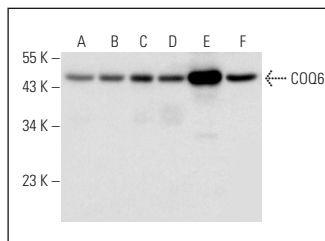
Suitable for use as control antibody for COQ6 siRNA (h): sc-92342, COQ6 siRNA (m): sc-142514, COQ6 shRNA Plasmid (h): sc-92342-SH, COQ6 shRNA Plasmid (m): sc-142514-SH, COQ6 shRNA (h) Lentiviral Particles: sc-92342-V and COQ6 shRNA (m) Lentiviral Particles: sc-142514-V.

Molecular Weight of COQ6: 51 kDa.

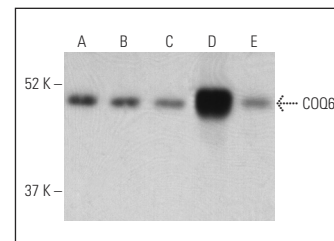
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



COQ6 (H-1): sc-393932. Western blot analysis of COQ6 expression in Hep G2 (A), HCT-116 (B), NCI-H460 (C) and COLO 205 (D) whole cell lysates and human heart (E) and mouse brain (F) tissue extracts.



COQ6 (H-1): sc-393932. Western blot analysis of COQ6 expression in NCI-H460 (A), COLO 205 (B) and T-47D (C) whole cell lysates and human heart (D) and mouse brain (E) tissue extracts. Detection reagent used: m-IgG₁ BP-HRP: sc-525408.

SELECT PRODUCT CITATIONS

- Luna-Sánchez, M., et al. 2015. The clinical heterogeneity of coenzyme Q₁₀ deficiency results from genotypic differences in the COQ9 gene. *EMBO Mol. Med.* 7: 670-687.
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- Xu, W., et al. 2019. Plant-derived alkaloid sinomenine potentiates glucocorticoid pharmacodynamics in mitogen-activated human peripheral blood mononuclear cells by regulating the translocation of glucocorticoid receptor. *Phytother. Res.* 33: 187-196.
- Widmeier, E., et al. 2019. Treatment with 2,4-dihydroxybenzoic acid prevents FSGS progression and renal fibrosis in podocyte-specific COQ6 knockout mice. *J. Am. Soc. Nephrol.* 30: 393-405.
- Yen, H.C., et al. 2020. Characterization of human mitochondrial PDSS and COQ proteins and their roles in maintaining coenzyme Q₁₀ levels and each other's stability. *Biochim. Biophys. Acta Bioenerg.* 1861: 148192.
- Pan, H.Z., et al. 2020. Cold-inducible RNA binding protein agonist enhances the cardioprotective effect of UW solution during extended heart preservation. *Artif. Organs* 44: E406-E418.
- Pujol, C., et al. 2021. Implication of folate deficiency in CYP2U1 loss of function. *J. Exp. Med.* 218: e20210846.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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