

COQ10B (M-74): sc-67297

BACKGROUND

COQ10B (coenzyme Q₁₀, homolog B) is a 247 amino acid protein encoded by the human gene COQ10B. COQ10B is a mitochondrial protein that belongs to the CoQ₁₀ family. COQ10B is an essential biological cofactor which increases brain mitochondrial concentration and exerts neuroprotective effects. Plasma COQ10B levels decrease in patients with advanced chronic heart failure (CHF) while COQ10B levels in hyperthyroid patients are found among the lowest detected in human diseases. Likewise, COQ10B is elevated in hypo-thyroid subjects, also in subclinical conditions, suggesting the usefulness of this index in assessing metabolic status in thyroid disorders. It is believed that secretion of adrenal hormones is in some way related to COQ10B levels, both in augmented and reduced conditions. However, since thyroid hormones have an important role in modulating COQ10B levels and metabolism, when coexistent, thyroid deficiency seems to play a prevalent role in comparison with adrenal deficiency.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: COQ10B (human) mapping to 2q33.1; Coq10b (mouse) mapping to 1 C1.2.

SOURCE

COQ10B (M-74) is a rabbit polyclonal antibody raised against amino acids 1-74 mapping at the N-terminus of COQ10B of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

COQ10B (M-74) is recommended for detection of COQ10B of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

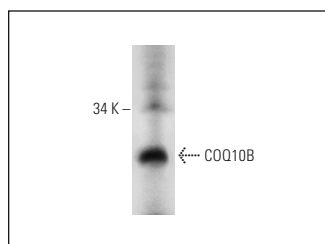
Suitable for use as control antibody for COQ10B siRNA (h): sc-62142, COQ10B siRNA (m): sc-62143, COQ10B shRNA Plasmid (h): sc-62142-SH, COQ10B shRNA Plasmid (m): sc-62143-SH, COQ10B shRNA (h) Lentiviral Particles: sc-62142-V and COQ10B shRNA (m) Lentiviral Particles: sc-62143-V.

Molecular Weight of COQ10B: 27 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



COQ10B (M-74): sc-67297. Western blot analysis of COQ10B expression in human pancreas tissue extract.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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