

# COQ3 (H-103): sc-98626

## 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. COQ3 (coenzyme Q3 homolog), also known as hexaprenyldihydroxybenzoate methyltransferase or DHHB methyltransferase (DHHB-MT), mitochondrial is a 369 amino acid protein that localizes to the mitochondrial matrix. COQ3 is a methyltransferase required for two steps in the biosynthesis of coenzyme Q.

## REFERENCES

- Jonassen, T. and Clarke, C.F. 2000. Isolation and functional expression of human COQ3, a gene encoding a methyltransferase required for ubiquinone biosynthesis. *J. Biol. Chem.* 275: 12381-12387.
- Wiemann, S., et al. 2001. Toward a catalog of human genes and proteins: sequencing and analysis of 500 novel complete protein coding human cDNAs. *Genome Res.* 11: 422-435.

## CHROMOSOMAL LOCATION

Genetic locus: COQ3 (human) mapping to 6q16.2; Coq3 (mouse) mapping to 4 A3.

## SOURCE

COQ3 (H-103) is a rabbit polyclonal antibody raised against amino acids 148-242 mapping within an internal region of COQ3 of human origin.

## PRODUCT

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

## APPLICATIONS

COQ3 (H-103) is recommended for detection of COQ3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

COQ3 (H-103) is also recommended for detection of COQ3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for COQ3 siRNA (h): sc-72973, COQ3 siRNA (m): sc-72974, COQ3 shRNA Plasmid (h): sc-72973-SH, COQ3 shRNA Plasmid (m): sc-72974-SH, COQ3 shRNA (h) Lentiviral Particles: sc-72973-V and COQ3 shRNA (m) Lentiviral Particles: sc-72974-V.

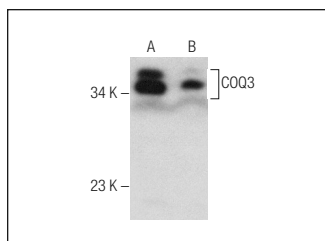
Molecular Weight of COQ3: 41 kDa.

Positive Controls: COQ3 (h2): 293T Lysate: sc-158390, T-47D cell lysate: sc-2293 or CCRF-CEM cell lysate: sc-2225.

## 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



COQ3 (H-103): sc-98626. Western blot analysis of COQ3 expression in CCRF-CEM (A) and T-47D (B) whole cell lysates.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **COQ3 (E-2): sc-377469** or **COQ3 (F-8): sc-376774**, our highly recommended monoclonal alternatives to COQ3 (H-103).