

COX6b2 (L-14): sc-79411

BACKGROUND

The cytochrome c oxidase (COX) family of proteins function as the final electron donor in the respiratory chain to drive a proton gradient across the inner mitochondrial membrane, ultimately resulting in the production of water. The mammalian COX apoenzyme is a dimer, with each monomer consisting of 13 subunits, some of which are mitochondrial and some of which are nuclear. Localized to the intermembrane space, COX6b2 (cytochrome c oxidase subunit 6B2), also known as Cytochrome c oxidase subunit VIb isoform 2 and cancer/testis antigen 59, is a 88 amino acid mitochondrial protein that is responsible for joining the 2 COX monomers to form the COX dimer. COX6b2 is specifically expressed in testis and is found to be upregulated in certain cancer cell lines.

REFERENCES

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4. Grossman, L.I. and Lomax, M.I. 1997. Nuclear genes for cytochrome c oxidase. *Biochim. Biophys. Acta* 1352: 174-192.
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CHROMOSOMAL LOCATION

Genetic locus: COX6B2 (human) mapping to 19q13.42.

SOURCE

COX6b2 (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of COX6b2 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.

Blocking peptide available for competition studies, sc-79411 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

COX6b2 (L-14) is recommended for detection of COX6b2 of 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).

Suitable for use as control antibody for COX6b2 siRNA (h): sc-72984, COX6b2 shRNA Plasmid (h): sc-72984-SH and COX6b2 shRNA (h) Lentiviral Particles: sc-72984-V.

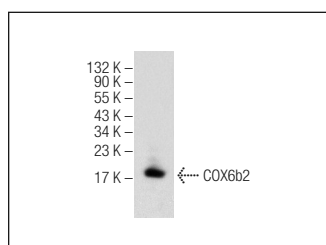
Molecular Weight of COX6b2: 11 kDa.

Positive Controls: F9 cell lysate: sc-2245.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



COX6b2 (L-14): sc-79411. Western blot analysis of COX6b2 expression in F9 whole cell lysate.

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.