

COX11 (S-20): sc-48982

BACKGROUND

Cytochrome c oxidase (COX) is the terminal enzyme in the electron transfer chain, functioning as a transmembrane proton pump that builds an electrochemical gradient with chemical energy from the reduction of O₂. Cytochrome c oxidase assembly protein COX11 is an intracellular mitochondrial membrane protein necessary for the construction of an active COX complex. COX11 contains a single transmembrane helix downstream of the N-terminal, mitochondrial targeting sequence and a C-terminal Cu(I)-binding domain. The assembly of COX requires the delivery of metal cofactors. Along with COX12 and SCO1/2, COX11 acts as a metal ion chaperone necessary for copper insertion into CuA and CuB redox-active copper centers of COX in eukaryotes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: COX11 (human) mapping to 17q22; Cox11 (mouse) mapping to 11 D.

SOURCE

COX11 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of COX11 of human origin.

STORAGE

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

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-48982 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

COX11 (S-20) is recommended for detection of COX11 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

COX11 (S-20) is also recommended for detection of COX11 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for COX11 siRNA (h): sc-60438, COX11 siRNA (m): sc-60439, COX11 shRNA Plasmid (h): sc-60438-SH, COX11 shRNA Plasmid (m): sc-60439-SH, COX11 shRNA (h) Lentiviral Particles: sc-60438-V and COX11 shRNA (m) Lentiviral Particles: sc-60439-V.

Molecular Weight of COX11: 28 kDa.

Positive Controls: Mouse brain extract: sc-2253.

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) 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.

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.