SANTA CRUZ BIOTECHNOLOGY, INC.

# COX6a1 (L-18): sc-107510

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

Members of 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 thirteen subunits, some of which are mitochondrial and some of which are nuclear. COX6a1 (cytochrome c oxidase subunit VIa polypeptide 1), also known as COX6AL (cytochrome c oxidase polypeptide VIa-liver) or COX6A, is a 109 amino acid protein that localizes to mitochondrial inner membrane and belongs to the cytochrome c oxidase subunit 6A family. COX6a1 is one of multiple terminal oxidases in mitochondrial electron transport and is encoded by a gene that maps to human chromosome 12q24.31.

## REFERENCES


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5. Wong-Riley, M., Guo, A., Bachman, N.J. and Lomax, M.I. 2000. Human COX6A1 gene: promoter analysis, cDNA isolation and expression in the monkey brain. Gene 247: 63-75.
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## CHROMOSOMAL LOCATION

Genetic locus: COX6A1 (human) mapping to 12q24.31.

## STORAGE

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

## SOURCE

COX6a1 (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of COX6a1 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-107510 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

COX6a1 (L-18) is recommended for detection of COX6a1 of 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).

COX6a1 (L-18) is also recommended for detection of COX6a1 in additional species, including canine.

Suitable for use as control antibody for COX6a1 siRNA (h): sc-96108, COX6a1 shRNA Plasmid (h): sc-96108-SH and COX6a1 shRNA (h) Lentiviral Particles: sc-96108-V.

Molecular Weight of COX6a1: 12 kDa.

## 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.