SANTA CRUZ BIOTECHNOLOGY, INC.

# ADX (K-15) : sc-30283

## BACKGROUND

Adrenodoxin (Adx) is an acidic [2Fe-2S] adrenal ferredoxin that belongs to the vertebrate ferredoxin family. ADX functions as a soluble electron carrier between the NADPH-dependent adrenodoxin reductase and cytochrome P450. ADX localizes to the adrenal cortex mitochondrial matrix, where it participates in the synthesis of Vitamin D and bile acids. Human ADX maps to chromosome 11q22.3.

## REFERENCES


1. Morel, Y., Weiss, R., Lohr, F., Pristovsek, P., Hannemann, F., Bernhardt, R., Ruterjans, H. 1988. Assignment of the functional gene for human adrenodoxin to chromosome 11q13-qter and of adrenodoxin pseudo genes to chromosome 20cen-q13.1. Am. J. Hum. Genet. 43: 52-59.
2. Grinberg, A., Hannemann, F., Schiffler, B., Muller, J., Heinemann, U., Bernhardt, R. 2000. Adrenodoxin: structure, stability, and electron transfer properties. Proteins 4: 590-612.
3. Beilke, D., Picado-Leonard, J., Wu, D., Chang, C., Mohandas, T., Chung, B., Miller, W. 2002. A new electron transport mechanism in mitochondrial steroid hydroxylase systems based on structural changes upon the reduction of adrenodoxin. Biochemistry 25: 7969-7978.
4. LocusLink Report (LocusID: 2230). http://www.ncbi.nlm.nih.gov/LocusLink/


## CHROMOSOMAL LOCATION

Genetic locus: FDX1 (human) mapping to 11q22.3; Fdx1 (mouse) mapping to 9 A5.3.

## SOURCE

ADX (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Adrenodoxin 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-30282 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

ADX (K-15) is recommended for detection of precursor and mature Adrenodoxin 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).

ADX (K-15) is also recommended for detection of precursor and mature Adrenodoxin in additional species, including avian.

Suitable for use as control antibody for ADX siRNA (h): sc-105047, ADX shRNA Plasmid (h): sc-105047-SH and ADX shRNA (h) Lentiviral Particles: sc-105047-V.

## 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.