

ADX (T-15): sc-30282

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

- 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.
- Grinberg, A., Hannemann, F., Schiffler, B., Muller, J., Heinemann, U., Bernhardt, R. 2000. Adrenodoxin: structure, stability, and electron transfer properties. *Proteins* 4: 590-612.
- 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.
- 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 (T-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 (T-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 (T-15) is also recommended for detection of precursor and mature Adrenodoxin in additional species, including equine, canine, bovine and porcine.

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.