SANTA CRUZ BIOTECHNOLOGY, INC.

FDX1L (h): 293T Lysate: sc-116756

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. FDX1L is an Adx-like protein that is encoded by a gene that maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) super-family members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs). Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19. Translocations with chromosome 19 and chromosome 14 can be seen in some lymphoproliferative disorders and typically involve the proto-oncogene Bcl3.

REFERENCES

1. Morel, Y., et al. 1988. Assignment of the functional gene for human adrenodoxin to chromosome 11q13—qter and of adrenodoxin pseudogenes to chromosome 20cen—q13.1. Am. J. Hum. Genet. 43: 52-59.
2. Zimmermann, W., et al. 1988. Chromosomal localization of the carcinoembryonic antigen gene family and differential expression in various tumors. Cancer Res. 48: 2550-2554.
3. LaPoint, S.F., et al. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). Adv. Anat. Pathol. 7: 307-321.
4. Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. Gene 241: 45-50.
5. Grinberg, A.V., et al. 2000. Adrenodoxin: structure, stability, and electron transfer properties. Proteins 40: 590-612.
6. Beilke, D., et al. 2002. A new electron transport mechanism in mitochondrial steroid hydroxylase systems based on structural changes upon the reduction of adrenodoxin. Biochemistry 41: 7969-7978.
7. Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. Cytogenet. Genome Res. 97: 171-178.
8. Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. Eur. J. Immunogenet. 29: 287-291.
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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: FDX1L (human) mapping to 19p13.2.

PRODUCT

FDX1L (h): 293T Lysate represents a lysate of human FDX1L transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

FDX1L (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive FDX1L antibodies. Recommended use: 10-20 µl per lane.

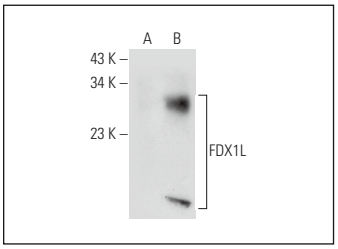
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FDX1L (C-12): sc-515121 is recommended as a positive control antibody for Western Blot analysis of enhanced human FDX1L expression in FDX1L transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



FDX1L (C-12): sc-515121. Western blot analysis of FDX1L expression in non-transfected: sc-117752 (**A**) and human FDX1L transfected: sc-116756 (**B**) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.