SANTA CRUZ BIOTECHNOLOGY, INC.

FDX1L (C-12): sc-515121

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

FDX1L (C-12) is a mouse monoclonal antibody raised against amino acids 48-104 mapping within an internal region of FDX1L of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FDX1L (C-12) is available conjugated to agarose (sc-515121 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515121 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515121 PE), fluorescein (sc-515121 FITC), Alexa Fluor® 488 (sc-515121 AF488), Alexa Fluor® 546 (sc-515121 AF546), Alexa Fluor® 594 (sc-515121 AF594) or Alexa Fluor® 647 (sc-515121 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515121 AF680) or Alexa Fluor® 790 (sc-515121 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FDX1L (C-12) is recommended for detection of FDX1L of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for FDX1L siRNA (h): sc-97511, FDX1L shRNA Plasmid (h): sc-97511-SH and FDX1L shRNA (h) Lentiviral Particles: sc-97511-V.

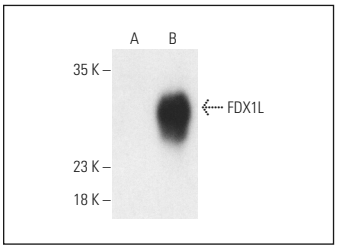
Molecular Weight of FDX1L: 20 kDa.

Positive Controls: FDX1L (h): 293T Lysate: sc-116756.

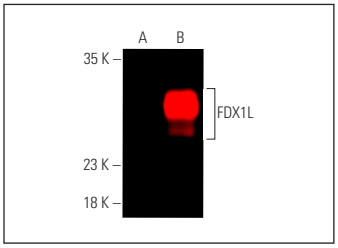
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

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. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.



FDX1L (C-12): sc-515121. Near-Infrared western blot analysis of FDX1L expression in non-transfected: sc-117752 (**A**) and human FDX1L transfected: sc-116756 (**B**) 293T whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG_1 BP-CFL 790: sc-533666.

SELECT PRODUCT CITATIONS

1. Zhang, J., et al. 2020. FDXR regulates TP73 tumor suppressor via IRP2 to modulate aging and tumor suppression. J. Pathol. 251: 284-296.

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.