SANTA CRUZ BIOTECHNOLOGY, INC.

SDAD1 (C-12): sc-515320

BACKGROUND

SDAD1 (SDA1 domain-containing protein 1) is a 687 amino acid protein that belongs to the SDA1 family. The SDAD1 protein is required for 60S pre-ribosomal subunits export to the cytoplasm. Highly expressed in testis, kidney, spleen, brain and fetal tissues, SDAD1 is also expressed at lower levels in heart, lung, liver, small intestine, ovary, uterus, mammary gland and placenta. Variations in SDAD1 may be a cause of susceptibility to seasonal allergic rhinitis (SAR). SAR is a common allergic disorder characterized by episodes of sneezing, rhinorrhea, and swelling of the nasal mucosa. DAZL and Pumilio 2 bind the 3'-UTR mRNA of SDAD1, suggesting that these proteins may regulate translation of SDAD1. Existing as two alternatively spliced isoforms, the SDAD1 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, fruit fly, mosquito, *C. elegans, S. pombe, S. cerevisiae, K. lactis, E. gossypii, M. grisea, N. crassa, A. thaliana* and rice, and maps to human chromosome 4q21.1.

REFERENCES

1. Yu, Y., et al. 2001. Gene expression profiling in human fetal liver and identification of tissue- and developmental-stage-specific genes through compiled expression profiles and efficient cloning of full-length cDNAs. Genome Res. 11: 1392-1403.
2. Andersen, J.S., et al. 2002. Directed proteomic analysis of the human nucleolus. Curr. Biol. 12: 1-11.
3. Babbio, F., et al. 2004. Expression and localization studies of hSDA, the human ortholog of the yeast SDA1 gene. Cell Cycle 3: 486-490.
4. Fox, M., et al. 2005. Identification and characterization of RNA sequences to which human PUMILIO-2 (PUM2) and deleted in azoospermia-like (DAZL) bind. Genomics 85: 92-105.

CHROMOSOMAL LOCATION

Genetic locus: SDAD1 (human) mapping to 4q21.1; Sdad1 (mouse) mapping to 5 E2.

SOURCE

SDAD1 (C-12) is a mouse monoclonal antibody raised against amino acids 101-257 mapping within an internal region of SDAD1 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.

SDAD1 (C-12) is available conjugated to agarose (sc-515320 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515320 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515320 PE), fluorescein (sc-515320 FITC), Alexa Fluor® 488 (sc-515320 AF488), Alexa Fluor® 546 (sc-515320 AF546), Alexa Fluor® 594 (sc-515320 AF594) or Alexa Fluor® 647 (sc-515320 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515320 AF680) or Alexa Fluor® 790 (sc-515320 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

SDAD1 (C-12) is recommended for detection of SDAD1 of mouse, rat and 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 SDAD1 siRNA (h): sc-89086, SDAD1 siRNA (m): sc-153281, SDAD1 shRNA Plasmid (h): sc-89086-SH, SDAD1 shRNA Plasmid (m): sc-153281-SH, SDAD1 shRNA (h) Lentiviral Particles: sc-89086-V and SDAD1 shRNA (m) Lentiviral Particles: sc-153281-V.

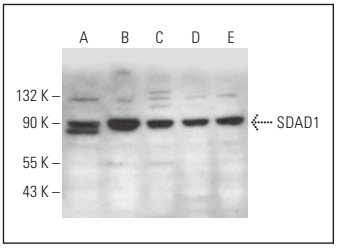
Molecular Weight of SDAD1 isoforms 1/2: 80/68 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181, RT-4 whole cell lysate: sc-364257 or HeLa whole cell lysate: sc-2200.

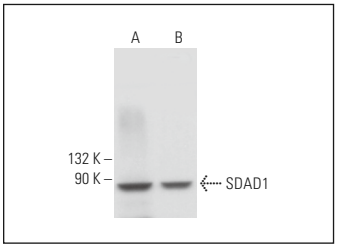
RECOMMENDED SUPPORT REAGENTS

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



SDAD1 (C-12): sc-515320. Western blot analysis of SDAD1 expression in NTERA-2 cl.D1 (**A**), Caki-1 (**B**), HeLa (**C**), RT-4 (**D**) and U-251-MG (**E**) whole cell lysates.



SDAD1 (C-12): sc-515320. Western blot analysis of SDAD1 expression in SP2/0 (**A**) and WEHI-231 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Jing, L., et al. 2019. Long non-coding RNA small nucleolar RNA host gene 7 facilitates cardiac hypertrophy via stabilization of SDA1 domain containing 1 mRNA. J. Cell. Biochem. 120: 15089-15097.

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.