SANTA CRUZ BIOTECHNOLOGY, INC.

SREBP-2 (N-19): sc-8151

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The low density lipoprotein (LDL) receptor mediates the endocytic uptake of cholesterol-carrying lipoproteins, thereby controlling cholesterol levels in cells and plasma. Transcription of the LDL receptor gene is controlled by a 10 base pair sequence in the 5' flanking region, designated sterol regulatory element 1 (SRE-1). When cellular sterol stores are depleted, the element is activated, the gene is transcribed and the cellular uptake of LDL increases. A set of SRE-binding proteins (SREBPs) have been identified, including two basic helix-loop-helix-leucine zipper (bHLH-Zip) transcription factors, designated SREBP-1 and SREBP-2. SREBP-1 and SREBP-2 have been shown to have the same specificity for SRE-1 *in vitro* and to activate the transcription of reporter genes containing SRE-1 in the same way.

CHROMOSOMAL LOCATION

Genetic locus: SREBF2 (human) mapping to 22q13.2; Srebf2 (mouse) mapping to 15 E1.

SOURCE

SREBP-2 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SREBP-2 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-8151 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-8151 X, 200 µg/0.1 ml.

APPLICATIONS

SREBP-2 (N-19) is recommended for detection of SREBP-2 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, 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).

SREBP-2 (N-19) is also recommended for detection of SREBP-2 in additional species, including canine.

Suitable for use as control antibody for SREBP-2 siRNA (h): sc-36559, SREBP-2 siRNA (m): sc-36560, SREBP-2 shRNA Plasmid (h): sc-36559-SH, SREBP-2 shRNA Plasmid (m): sc-36560-SH, SREBP-2 shRNA (h) Lentiviral Particles: sc-36559-V and SREBP-2 shRNA (m) Lentiviral Particles: sc-36560-V.

SREBP-2 (N-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SREBP-2: 68/125 kDa.

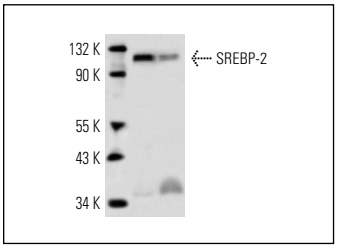
STORAGE

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.

DATA



SREBP-2 (N-19): sc-8151. Western blot analysis of SREBP-2 expression in U-937 (**A**) and PC-3 (**B**) nuclear extracts.

SELECT PRODUCT CITATIONS

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2. Zeng, L., et al. 2004. ATF-6 modulates SREBP-2-mediated lipogenesis. EMBO J. 23: 950-958.
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4. Sundqvist, A., et al. 2005. Control of lipid metabolism by phosphorylation-dependent degradation of the SREBP family of transcription factors by SCF(Fbw7). Cell Metab. 1: 379-391.
5. Takagi, M., et al. 2005. Sterol Regulatory Element-Binding Protein-2 modulates human brain acyl-CoA hydrolase gene transcription. Mol. Cell. Biochem. 275: 199-206.
6. Yao, M., et al. 2006. Activation of sterol regulatory element-binding proteins (SREBPs) is critical in IL-8-induced angiogenesis. J. Leukoc. Biol. 80: 608-620.
7. Jelinek, D., et al. 2009. Physiological and coordinate downregulation of the NPC1 and NPC2 genes are associated with the sequestration of LDL-derived cholesterol within endocytic compartments. J. Cell. Biochem. 108: 1102-1116.
8. Pramfalk, C., et al. 2010. HNF1α and SREBP2 are important regulators of NPC1L1 in human liver. J. Lipid Res. 51: 1354-1362.