SREBP-2 (H-164): sc-5603



The Power to Overtin

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 ten 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 (H-164) is a rabbit polyclonal antibody raised against amino acids 812-975 of SREBP-2 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SREBP-2 (H-164) is recommended for detection of SREBP-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 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.

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

Positive Controls: U-937 nuclear extract: sc-2156, PC-3 cell lysate: sc-2220 or KNRK nuclear extract: sc-2141.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

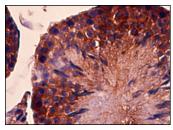
PROTOCOLS

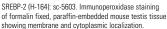
See our web site at www.scbt.com or our catalog for detailed protocols and support products.

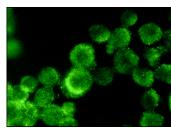
RESEARCH USE

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

DATA







SREBP-2 (H-164): sc-5603. Immunofluorescence staining of methanol-fixed U-937 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- 1. Weinhofer, I., et al. 2005. Liver X receptor α interferes with SREBP-1c-mediated ABCD2 expression. Novel cross-talk in gene regulation. J. Biol. Chem. 280: 41243-41251.
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- Harding, S.V., et al. 2010. Hepatic nuclear sterol regulatory binding element protein 2 abundance is decreased and that of ABCG5 increased in male hamsters fed plant sterols. J. Nutr. 140: 1249-1254.
- 5. Rideout, T.C., et al. 2010. High basal fractional cholesterol synthesis is associated with nonresponse of plasma LDL cholesterol to plant sterol therapy. Am. J. Clin. Nutr. 92: 41-46.
- Yasuda, A., et al. 2011. Cacao polyphenols influence the regulation of apolipoprotein in HepG2 and Caco2 cells. J. Agric. Food Chem. 59: 1470-1476
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Try SREBP-2 (1C6): sc-13552 or SREBP-2 (A-12): sc-271616, our highly recommended monoclonal aternatives to SREBP-2 (H-164). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see SREBP-2 (1C6): sc-13552.