

SREC (H-299): sc-25483

BACKGROUND

Scavenger receptors mediate the endocytosis and degradation of chemically modified low density lipoproteins (LDL), such as acetylated LDL (Ac-LDL) and oxidized LDL (Ox-LDL). The scavenger receptor expressed by endothelial cells (SREC) primarily binds Ac-LDL and aids in its degradation. However, it has been shown to bind other ligands such as Ox-LDL, which suggests that SREC has a binding specificity similar to the type I and II macrophage scavenger receptors. SREC is expressed in HUVEC, CAE, and CASM cell lines. It is characterized by an extra-cellular amino-terminal domain with five epidermal growth factor-like cysteine pattern signatures and an unusually long cytoplasmic carboxy-terminal domain. SREC is thought to be involved in the development of atherosclerosis as it mediates the recruitment, activation, and transformation of macrophages after endothelial cell injury.

REFERENCES

1. Lerman, A., et al. 1991. Circulating and tissue endothelin immunoreactivity in advanced atherosclerosis. *N. Engl. J. Med.* 325: 997-1001.
2. Adachi, H., et al. 1997. Expression cloning of a novel scavenger receptor from human endothelial cells. *J. Biol. Chem.* 272: 31217-31220.
3. Yamada, Y., et al. 1998. Scavenger receptor family proteins: roles for atherosclerosis, host defence and disorders of the central nervous system. *Cell. Mol. Life Sci.* 54: 628-640.
4. Shirai, H., et al. 1999. Structure and function of type I and II macrophage scavenger receptors. *Mech. Ageing Dev.* 111: 107-121.
5. Dhaliwal, B.S. and Steinbrecher, U.P. 1999. Scavenger receptors and oxidized low density lipoproteins. *Clin. Chim. Acta* 286: 191-205.
6. Steinbrecher, U.P., 1999. Receptors for oxidized low density lipoprotein. *Biochim. Biophys. Acta* 1436: 279-298.

CHROMOSOMAL LOCATION

Genetic locus: SCARF1 (human) mapping to 17p13.3; Scarf1 (mouse) mapping to 11 B5.

SOURCE

SREC (H-299) is a rabbit polyclonal antibody raised against amino acids 532-830 of SREC 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.

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.

APPLICATIONS

SREC (H-299) is recommended for detection of SREC of mouse, rat and human 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).

Suitable for use as control antibody for SREC siRNA (h): sc-36561, SREC siRNA (m): sc-36562, SREC shRNA Plasmid (h): sc-36561-SH, SREC shRNA Plasmid (m): sc-36562-SH, SREC shRNA (h) Lentiviral Particles: sc-36561-V and SREC shRNA (m) Lentiviral Particles: sc-36562-V.

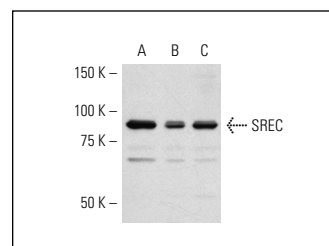
Molecular Weight of SREC: 86 kDa.

Positive Controls: SREC (h): 293T Lysate: sc-115472, A-431 whole cell lysate: sc-2201 or ECV304 cell lysate: sc-2269.

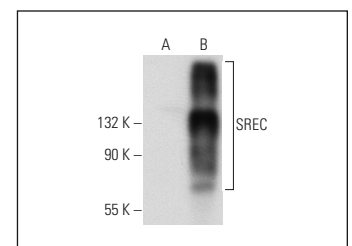
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SREC (H-299): sc-25483. Western blot analysis of SREC expression in HeLa (A), ECV304 (B) and A-431 (C) whole cell lysates.



SREC (H-299): sc-25483. Western blot analysis of SREC expression in non-transfected: sc-117752 (A) and human SREC transfected: sc-115472 (B) 293T whole cell lysates.

RESEARCH USE

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