

SR-A (h2): 293T Lysate: sc-111501

BACKGROUND

The macrophage class A scavenger receptor (SR-A) mediates the uptake of modified low density lipoprotein (LDL). The gene encoding human SR-A maps to chromosome 8 and gives rise to two alternatively spliced isoforms, type I and II (SR-AI and SR-AII), which were originally cloned from the phorbol ester-treated human monocytic cell line THP-1. Both isoforms contain six domains: cytoplasmic (I), membrane-spanning (II), spacer (III), α -helical coiled-coil (IV), collagen-like (V) and a type-specific C-terminal (VI). Domain IV is essential for the trimerization of SR-A, whereas domain V is essential for the wide range of ligand recognition. SR-A is expressed in liver, placenta and brain. Both SR-AI and SR-AII mediate the uptake of LDLs in atherosclerotic lesions. A third isoform, SR-AIII, is unable to uptake LDLs and acts as a dominant negative isoform to possibly protect cells found in advanced atherosclerotic lesions. SR-A plays a role not only in many macrophage-associated pathological processes, including atherosclerosis and Alzheimer's disease, but also in host defense and as an adhesion molecule.

REFERENCES

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3. Gough, P.J., Greaves, D.R. and Gordon, S. 1998. A naturally occurring isoform of the human macrophage scavenger receptor (SR-A) gene generated by alternative splicing blocks modified LDL uptake. *J. Lipid Res.* 39: 531-543.
4. Yokota, T., Ehlin-Henriksson, B. and Hansson, G.K. 1998. Scavenger receptors mediate adhesion of activated B lymphocytes. *Exp. Cell Res.* 239: 16-22.
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CHROMOSOMAL LOCATION

Genetic locus: MSR1 (human) mapping to 8p22.

PRODUCT

SR-A (h2): 293T Lysate represents a lysate of human SR-A transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

SR-A (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive SR-A antibodies. Recommended use: 10-20 μ l per lane.

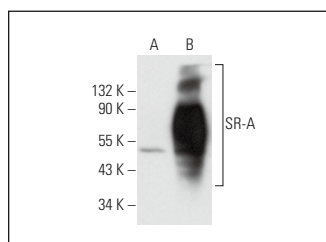
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

SR-A (E-5): sc-166184 is recommended as a positive control antibody for Western Blot analysis of enhanced human SR-A expression in SR-A transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

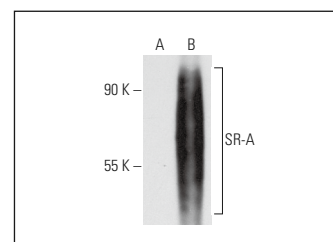
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



SR-A (E-5): sc-166184. Western blot analysis of SR-A expression in non-transfected: sc-117752 (A) and human SR-A transfected: sc-111501 (B) 293T whole cell lysates.



SR-A (B-9): sc-166139. Western blot analysis of SR-A expression in non-transfected: sc-117752 (A) and human SR-A transfected: sc-111501 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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