

SAA (h): 293T Lysate: sc-159936

BACKGROUND

The serum Amyloid A (SAA) family of proteins is encoded by multiple genes, which display allelic variation and a high degree of homology in mammals. The four members of the SAA gene family are clustered on human chromosome 11p15.1. Three SAA genes are differentially expressed and encode small apolipoproteins. SAA1 and SAA2 encode the acute phase SAAs (A-SAAs), and SAA4 encodes the constitutively expressed SAA (C-SAA). A fourth locus, SAA3 is a pseudogene that contains two C/EBP-binding sites and a third site, which interacts with SAA3 enhancer factor. Human SAA proteins are a group of apolipoproteins found predominantly in the high-density lipoprotein (HDL) fraction of plasma. SAA is a major acute-phase protein and precursor to Amyloid A protein, which is the major constituent of the fibril deposits of reactive amyloidosis. SAA is secreted in large amounts by the liver during microbial infections or inflammatory diseases.

REFERENCES

1. Kluge-Beckerman, B., Long, G.I. and Benson, M.D. 1986. DNA sequence evidence for polymorphic forms of human serum Amyloid A (SAA). *Biochem. Genet.* 24: 795-803.
2. Kluge-Beckerman, B., Dwulet, F.E. and Benson, M.D. 1988. Human serum Amyloid A. Three hepatic mRNAs and the corresponding proteins in one person. *J. Clin. Invest.* 82: 1670-1675.
3. Beach, C.M., De Beer, M.C., Sipe, J.D., Loose, L.D. and De Beer, F.C. 1992. Human serum Amyloid A protein. Complete amino acid sequence of a new variant. *Biochem. J.* 282: 615-620.
4. Sellar, G.C., Oghene, K., Boyle, S., Bickmore, W.A. and Whitehead, A.S. 1994. Organization of the region encompassing the human serum Amyloid A (SAA) gene family on chromosome 11p15.1. *Genomics* 23: 492-495.
5. Bing, Z., Reddy, S.A., Ren, Y., Qin, Y. and Liao, W.S. 1999. Purification and characterization of the serum Amyloid A3 enhancer factor. *J. Biol. Chem.* 274: 24649-24656.
6. Badolato, R., Wang, J.M., Stornello, S.L., Ponzi, A.N., Duse, M. and Musso, T. 2000. Serum Amyloid A is an activator of PMN antimicrobial functions: induction of degranulation, phagocytosis, and enhancement of anti-Candida activity. *J. Leukoc. Biol.* 67: 381-386.
7. Artl, A., Marsche, G., Lestavel, S., Sattler, W. and Malle, E. 2000. Role of serum Amyloid A during metabolism of acute-phase HDL by macrophages. *Arterioscler. Thromb. Vasc. Biol.* 20: 763-772.

CHROMOSOMAL LOCATION

Genetic locus: SAA1 (human) mapping to 11p15.1.

PRODUCT

SAA (h): 293T Lysate represents a lysate of human SAA transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

SAA (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive SAA antibodies. Recommended use: 10-20 µl per lane.

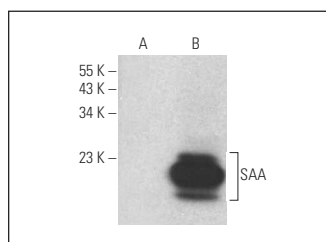
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

SAA (115): sc-59679 is recommended as a positive control antibody for Western Blot analysis of enhanced human SAA expression in SAA transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

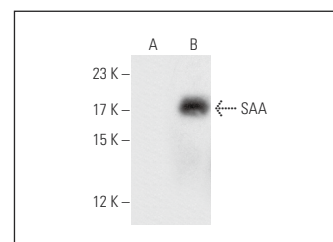
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-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.

DATA



SAA (115): sc-59679. Western blot analysis of SAA expression in non-transfected: sc-117752 (A) and human SAA transfected: sc-159936 (B) 293T whole cell lysates. Detection reagent used: m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM.



SAA (SAA15): sc-52215. Western blot analysis of SAA expression in non-transfected: sc-117752 (A) and human SAA transfected: sc-159936 (B) 293T whole cell lysates.

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.