SANTA CRUZ BIOTECHNOLOGY, INC.

SAAL1 (D-15): sc-169241

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The serum amyloid A (SAA) protein is an acute phase apolipoprotein reactant produced mainly by hepatocytes and under regulation of inflammatory cytokines. The SAA cleavage product, designated amyloid protein A (AA), is deposited systemically as amyloid in vital organs including the liver, spleen, and kidneys in patients with chronic inflammatory diseases. SAAL1 (serum amyloid A-like 1) is a 474 amino acid protein that belongs to the SAAL1 family. SAAL1 is phosphorylated upon DNA damage, probably by Atm or ATR. The SAAL1 gene is conserved in chimpanzee, canine, bovine, mouse and zebrafish, and maps to human chromosome 11p15.1. In the mouse genome several amyloid related genes are located in this region which included Saa1l (serum amyloid A-like 1), Saa3 (serum amyloid A 3), Saa4 (serum amyloid A 4), Saa1 (serum amyloid A 1), Saa2 (serum amyloid A 2) and Zdhhc13 (zinc finger, DHHC domain containing 13).

REFERENCES

1. Sellar, G.C., et al. 1994. The human serum amyloid A protein (SAA) superfamily gene cluster: mapping to chromosome 11p15.1 by physical and genetic linkage analysis. Genomics 19: 221-227.
2. de Beer, M.C., et al. 1996. Structure of the mouse Saa4 gene and its linkage to the serum amyloid A gene family. Genomics 34: 139-142.
3. Stelzl, U., et al. 2005. A human protein-protein interaction network: a resource for annotating the proteome. Cell 122: 957-968.
4. Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. Nature 440: 497-500
5. Matsuoka, S., et al. 2007. ATM and ATR substrate analysis reveals extensive protein networks responsive to DNA damage. Science 316: 1160-1166.
6. Saleem, A.N., et al. 2010. Mice with alopecia, osteoporosis, and systemic amyloidosis due to mutation in Zdhhc13, a gene coding for palmitoyl acyltransferase. PLoS Genet. 6: e1000985.

CHROMOSOMAL LOCATION

Genetic locus: SAAL1 (human) mapping to 11p15.1; Saal1 (mouse) mapping to 7 B4.

SOURCE

SAAL1 (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SAAL1 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-169241 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

SAAL1 (D-15) is recommended for detection of SAAL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

SAAL1 (D-15) is also recommended for detection of SAAL1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SAAL1 siRNA (h): sc-96280, SAAL1 siRNA (m): sc-153195, SAAL1 shRNA Plasmid (h): sc-96280-SH, SAAL1 shRNA Plasmid (m): sc-153195-SH, SAAL1 shRNA (h) Lentiviral Particles: sc-96280-V and SAAL1 shRNA (m) Lentiviral Particles: sc-153195-V.

Molecular Weight of SAAL1: 54 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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