

SART-1 (N-16): sc-55984

BACKGROUND

SART-1 (squamous cell carcinoma antigen recognized by T cells), also known as Ara1, HOMS1 or Snu66, is a ubiquitously expressed protein that is involved in mRNA splicing and cell proliferation. The gene encoding SART-1 is posttranscriptionally modified to produce two proteins: SART-1(800), which is the native transcript and is localized to the nucleus of proliferating cells, and SART-1(259), which is expressed in the cytosol of epithelial cancers. While both proteins are involved in regulating cell proliferation, SART-1(259) is also an essential component in the spliceosome C assembly pathway playing a role in pre-mRNA splicing. SART-1(259) possesses a tumor-rejection antigen that can induce restricted cytotoxic T lymphocytes in cancer patients, suggesting a possible role in immunotherapy. Additionally, the polymorphic variation within the SART-1 gene may be a cause of atopy, an allergic hypersensitivity characterized by eczema, asthma and allergic conjunctivitis.

REFERENCES

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2. Kawamoto, M., et al. 1999. Expression of the SART-1 tumor rejection antigen in breast cancer. *Int. J. Cancer* 80: 64-67.
3. Bolland, D.J. and Hewitt, J.E. 2001. Intron loss in the SART1 genes of *Fugu rubripes* and *Tetraodon nigroviridis*. *Gene* 271: 43-49.
4. Wheatley, A.P., et al. 2002. Identification of the autoantigen SART-1 as a candidate gene for the development of atopy. *Hum. Mol. Genet.* 11: 2143-2146.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605941. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Yoshida, S. and Tanaka, R. 2004. Generation of a human leukocyte antigen-A24-restricted antitumor cell with the use of SART-1 peptide and dendritic cells in patients with malignant brain tumors. *J. Lab. Clin. Med.* 144: 201-207.

CHROMOSOMAL LOCATION

Genetic locus: SART1 (human) mapping to 11q13.1; Sart1 (mouse) mapping to 19 A.

SOURCE

SART-1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SART-1 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-55984 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-55984 X, 200 µg/0.1 ml.

APPLICATIONS

SART-1 (N-16) is recommended for detection of SART-1 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).

SART-1 (N-16) is also recommended for detection of SART-1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for SART-1 siRNA (h): sc-62978, SART-1 siRNA (m): sc-62979, SART-1 shRNA Plasmid (h): sc-62978-SH, SART-1 shRNA Plasmid (m): sc-62979-SH, SART-1 shRNA (h) Lentiviral Particles: sc-62978-V and SART-1 shRNA (m) Lentiviral Particles: sc-62979-V.

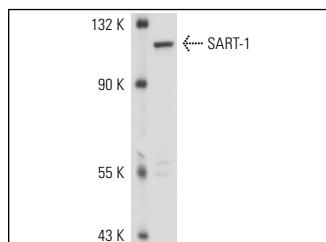
SART-1 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of SART-1: 90 kDa.

Molecular Weight (observed) of SART-1: 117-132 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

DATA



SART-1 (N-16): sc-55984. Western blot analysis of SART-1 expression in Jurkat nuclear extract.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **SART-1 (A-5): sc-376460** or **SART-1 (E-2): sc-376307**, our highly recommended monoclonal alternatives to SART-1 (N-16).