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 post-transcriptionally 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


CHROMOSOMAL LOCATION

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

SOURCE

SART-1 (E-2) is a mouse monoclonal antibody raised against amino acids 107-406 mapping near the N-terminus of SART-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SART-1 (E-2) is recommended for detection of SART-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 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.

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, Raji whole cell lysate: sc-364236 or MOLT-4 cell lysate: sc-2233.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

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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 for detailed protocols and support products.