

RCAS1 (h): 293 Lysate: sc-112757

BACKGROUND

RCAS1/EBAG9 (receptor-binding cancer antigen expressed on SiSo cells/ estrogen receptor-binding fragment-associated gene 9) is an estrogen-transcribed protein. Soluble and membranous RCAS1 proteins may play a role in the immune escape of tumor cells by promoting T lymphocyte inhibition of growth and apoptosis. RCAS1 is expressed in a wide variety of cancers, including uterine, ovarian and lung cancer cells, and acts as a ligand for a putative receptor present on peripheral lymphocytes. RCAS1 is highly expressed not only in cancer cells but also in non-tumor bile duct cells subject to immune attack. RCAS1 inhibits the *in vitro* growth of receptor-expressing cells and induces apoptosis, contributing to the ability of tumor cells to evade host immune surveillance. High expression of RCAS1 significantly correlates with tumor progression and with poor outcome for many cancer patients. The human RCAS1/EBAG9 gene maps to human chromosome 8q23.2.

REFERENCES

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2. Rousseau, J., Têtu, B., Caron, D., Malenfant, P., Cattaruzzi, P., Audette, M., Doillon, C., Tremblay, J.P. and Guérette, B. 2002. RCAS1 is associated with ductal breast cancer progression. *Biochem. Biophys. Res. Commun.* 293: 1544-1549.
3. Oizumi, S., Yamazaki, K., Nakashima, M., Watanabe, T., Hommura, F., Ogura, S., Nishimura, M. and Dosaka-Akita, H. 2002. RCAS1 expression: a potential prognostic marker for adenocarcinomas of the lung. *Oncology* 62: 333-339.
4. Enjoui, M., Nakashima, M., Nishi, H., Choi, I., Oimomi, H., Sugimoto, R., Kotoh, K., Taguchi, K., Nakamuta, M., Nawata, H. and Watanabe, T. 2002. The tumor-associated antigen, RCAS1, can be expressed in immune-mediated diseases as well as in carcinomas of biliary tract. *J. Hepatol.* 36: 786-792.
5. Hiraoka, K., Hida, Y., Miyamoto, M., Oshikiri, T., Suzuoki, M., Nakakubo, Y., Shinohara, T., Itoh, T., Shichinohe, T., Kondo, S., Kasahara, N. and Katoh, H. 2002. High expression of tumor-associated antigen RCAS1 in pancreatic ductal adenocarcinoma is an unfavorable prognostic marker. *Int. J. Cancer* 99: 418-423.
6. LocusLink Report (LocusID: 9166). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: EBAG9 (human) mapping to 8q23.2.

PRODUCT

RCAS1 (h): 293 Lysate represents a lysate of human RCAS1 transfected 293 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

RCAS1 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive RCAS1 antibodies. Recommended use: 10-20 µl per lane.

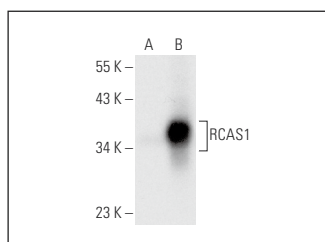
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

RCAS1 (D-9): sc-398052 is recommended as a positive control antibody for Western Blot analysis of enhanced human RCAS1 expression in RCAS1 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

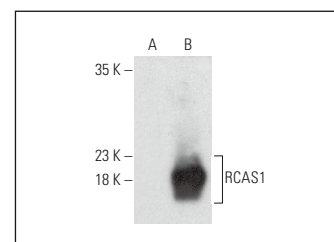
RECOMMENDED SUPPORT REAGENTS

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



RCAS1 (D-9): sc-398052. Western blot analysis of RCAS1 expression in non-transfected: sc-110760 (A) and human RCAS1 transfected: sc-112757 (B) 293 whole cell lysates.



RCAS1 (C-10): sc-515559. Western blot analysis of RCAS1 expression in non-transfected: sc-110760 (A) and human RCAS1 transfected: sc-112757 (B) 293 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.