## 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.

## CHROMOSOMAL LOCATION

Genetic locus: EBAG9 (human) mapping to 8q23; Ebag9 (mouse) mapping to 15 D 1 .

## SOURCE

RCAS1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RCAS1 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{glgG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-23396 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

RCAS1 (C-20) is recommended for detection of RCAS1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [ $1-2 \mu \mathrm{~g}$ per 100-500 $\mu \mathrm{g}$ 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).

RCAS1 (C-20) is also recommended for detection of RCAS1 in additional species, including equine, canine, bovine, porcine and avian.
Suitable for use as control antibody for RCAS1 siRNA (h): sc-37493, RCAS1 siRNA (m): sc-37494, RCAS1 shRNA Plasmid (h): sc-37493-SH, RCAS1 shRNA Plasmid (m): sc-37494-SH, RCAS1 shRNA (h) Lentiviral Particles: sc-37493-V and RCAS1 shRNA (m) Lentiviral Particles: sc-37494-V.

Molecular Weight of RCAS1: 32 kDa .
Positive Controls: mouse lung extract: sc-2390 or RCAS1 (h): 293 Lysate: sc-112757.

## 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: 1:1001:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



## SELECT PRODUCT CITATIONS

1. Hong, X ., et al. 2009. EBAG9 inducing hyporesponsiveness of T cells promotes tumor growth and metastasis in 4T1 murine mammary carcinoma. Cancer Sci. 100: 961-969.
2. Liby, T.A., et al. 2011. Akt3 controls vascular endothelial growth factor secretion and angiogenesis in ovarian cancer cells. Int. J. Cancer 130: 532-543.

## 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.

