SANTA CRUZ BIOTECHNOLOGY, INC.

RIZ (N-20): sc-14228



BACKGROUND

The Rb-interacting zinc-finger gene RIZ1 (also known as G3B or MTB-Zf) is commonly mutated in colorectal, gastric and endometrial cancers and has demonstrated a capacity to induce cell cycle arrest and apoptosis. RIZ is a candidate tumor suppressor gene on 1p36, a region frequently rearranged in a wide variety of human tumors. RIZ is the founding member of the PR-domain family of zinc-finger genes. Two products are produced from the RIZ locus which differ by the presence or absence of the PR domain; the PR-plus, RIZ1, is commonly lost or underexpressed whereas the PR-minus, RIZ2, is always present in cancer cells. This yin-yang imbalance in the amount of the two RIZ products may be an important cause of malignancy.

REFERENCES

- Medici, N., et al. 1999. Identification of a DNA binding protein cooperating with estrogen receptor as RIZ (retinoblastoma interacting zinc-finger protein). Biochem. Biophys. Res. Commun. 264: 983-989.
- 2. Huang, S. 1999. The retinoblastoma protein-interacting zinc-finger gene RIZ in 1p36-linked cancers. Front. Biosci. 4: 528-532.

CHROMOSOMAL LOCATION

Genetic locus: PRDM2 (human) mapping to 1p36.21; Prdm2 (mouse) mapping to 4 E1.

SOURCE

 ${\rm RIZ}$ (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ${\rm RIZ}$ of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-14228 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RIZ (N-20) is recommended for detection of RIZ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

RIZ (N-20) is also recommended for detection of RIZ in additional species, including porcine.

Suitable for use as control antibody for RIZ siRNA (h): sc-106513, RIZ siRNA (m): sc-152980, RIZ shRNA Plasmid (h): sc-106513-SH, RIZ shRNA Plasmid (m): sc-152980-SH, RIZ shRNA (h) Lentiviral Particles: sc-106513-V and RIZ shRNA (m) Lentiviral Particles: sc-152980-V.

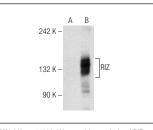
Molecular Weight of RIZ: 250 kDa.

Positive Controls: RIZ (h): 293T Lysate: sc-372474.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



RIZ (N-20): sc-14228. Western blot analysis of RIZ expression in non-transfected: sc-117752 (**A**) and human RIZ transfected: sc-372474 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

 Akahira, J., et al. 2007. Decreased expression of RIZ1 and its clinicopathological significance in epithelial ovarian carcinoma: correlation with epigenetic inactivation by aberrant DNA methylation. Pathol. Int. 57: 725-733.

STORAGE

Store at 4° C, **D0 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 Satisfation Guaranteed

Try **RIZ (33AT1045): sc-130256**, our highly recommended monoclonal alternative to RIZ (N-20).