SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF331 (P-16): sc-249526



BACKGROUND

ZNF331 (zinc finger protein 331), also known as ZNF361 (zinc finger protein 361), ZNF463 (zinc finger protein 463) or RITA, is a 463 amino acid nuclear protein that may be involved in transcriptional regulation and spermatogenesis. Specific to the testis, ZNF331 contains $12 \text{ C}_2\text{H}_2$ -type zinc finger, one KRAB domain and belongs to the Krüppel C_2H_2 -type zinc-finger protein family. The gene that encodes ZNF331 consists of close to 60,000 bases and maps to human chromosome 19q13.42. Chromosome 19 consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families and Fc receptors (FcRs).

REFERENCES

- 1. Rippe, V., et al. 1999. A KRAB zinc finger protein gene is the potential target of 19q13 translocation in benign thyroid tumors. Genes Chromosomes Cancer 26: 229-236.
- Wang, L., et al. 2000. C-CAM1, a candidate tumor suppressor gene, is abnormally expressed in primary lung cancers. Clin. Cancer Res. 6: 2988-2993.
- 3. Wu, H., et al. 2001. Isolation, characterization, and mapping of a novel human KRAB zinc finger protein encoding gene ZNF463. Biochim. Biophys. Acta 1518: 190-193.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 606043. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 5. Meiboom, M., et al. 2003. A 3.4-kbp transcript of ZNF331 is solely expressed in follicular thyroid adenomas. Cytogenet. Genome Res. 101: 113-117.
- 6. Meiboom, M., et al. 2004. Molecular characterization and mapping of the canine KRAB zinc finger gene ZNF331. Anim. Genet. 35: 262-263.

CHROMOSOMAL LOCATION

Genetic locus: ZNF331 (human) mapping to 19q13.42.

SOURCE

ZNF331 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF331 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-249526 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

ZNF331 (P-16) is recommended for detection of ZNF331 of 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).

Suitable for use as control antibody for ZNF331 siRNA (h): sc-97397, ZNF331 shRNA Plasmid (h): sc-97397-SH and ZNF331 shRNA (h) Lentiviral Particles: sc-97397-V.

Molecular Weight of ZNF331: 54 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or HL-60 whole cell lysate: sc-2209.

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.





ZNF331 (P-16): sc-249526. Western blot analysis of ZNF331 expression in MCF7 (A) and HL-60 (B) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.