SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF271 (C-16): sc-82441

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. As a member of the krüppel C_2H_2-type zinc-finger protein family, ZNF271 (zinc finger protein 271), also known as zinc finger protein 7, HZF7 and Epstein-Barr virus-induced zinc finger protein, is a 655 amino acid nuclear protein that contains 19 C_2H_2-type zinc fingers. ZNF271 is expressed in pancreatic islet cells, T-cell lines, thryoid and thymocytes. Interestingly, ZNF271 plays a significant role in Epstein-Barr virus transformation. The gene encoding ZNF271 maps to a chromosomal region that is frequently associated with hematopoietic malignancies. There are two isoforms of ZNF271 that are produced as a result of alternative splicing events.

REFERENCES

1. Payre, F., et al. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. FEBS Lett. 234: 245-250.
2. Rosenfeld, R., et al. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. J. Biomol. Struct. Dyn. 11: 557-570.
3. Abrink, M., et al. 1995. Isolation of cDNA clones for 42 different Krüppel-related zinc finger proteins expressed in the human monoblast cell line U-937. DNA Cell Biol. 14: 125-136.
4. Tune, C.E., et al. 2002. Sustained expression of the novel EBV-induced zinc finger gene, ZNFEB, is critical for the transition of B lymphocyte activation to oncogenic growth transformation. J. Immunol. 168: 680-688.

CHROMOSOMAL LOCATION

Genetic locus: ZNF271 (human) mapping to 18q12.1.

SOURCE

ZNF271 (C-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of ZNF271 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82441 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82441 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

ZNF271 (C-16) is recommended for detection of ZNF271 of human origin by Western Blotting (starting dilution 1:200, 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).

ZNF271 (C-16) is also recommended for detection of ZNF271 in additional species, including porcine.

Suitable for use as control antibody for ZNF271 siRNA (h): sc-76974, ZNF271 siRNA (m): sc-76975, ZNF271 shRNA Plasmid (h): sc-76974-SH, ZNF271 shRNA Plasmid (m): sc-76975-SH, ZNF271 shRNA (h) Lentiviral Particles: sc-76974-V and ZNF271 shRNA (m) Lentiviral Particles: sc-76975-V.

ZNF271 (C-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

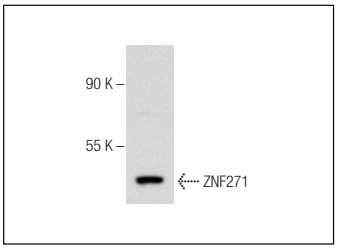
Molecular Weight of ZNF271 isoforms: 76/48 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ZNF271 (C-16): sc-82441. Western blot analysis of ZNF271 expression in Jurkat whole cell lysate.

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.