

ZNF271 (N-16): sc-82445



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 C₂H₂-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 C₂H₂-type zinc fingers. ZNF271 is expressed in pancreatic islet cells, T-cell lines, thyroid 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.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604754. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: ZNF271 (human) mapping to 18q12.1; Zfp35 (mouse) mapping to 18 A2.

SOURCE

ZNF271 (N-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-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-82445 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-82445 X, 200 µg/0.1 ml.

APPLICATIONS

ZNF271 (N-16) is recommended for detection of ZNF271 of human and, to a lesser extent, mouse 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).

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

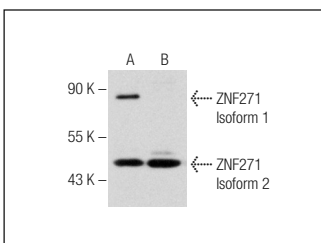
Molecular Weight of ZNF271 isoforms: 76/48 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, mouse skeletal muscle tissue extract or human skeletal muscle extract: sc-363776.

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 (N-16): sc-82445. Western blot analysis of ZNF271 expression in mouse skeletal muscle (A) and human skeletal muscle (B) tissue extracts.

STORAGE

Store at 4° C, **DO 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.