

# ZNF271 (A-3): sc-377498



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<sub>2</sub>H<sub>2</sub>-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<sub>2</sub>H<sub>2</sub>-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. and Vincent, A. 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. and Margalit, H. 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; Zfp35 (mouse) mapping to 18 A2.

## SOURCE

ZNF271 (A-3) is a mouse monoclonal antibody raised against amino acids 1-100 mapping at the N-terminus of ZNF271 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-377498 X, 200 µg/0.1 ml.

ZNF271 (A-3) is available conjugated to agarose (sc-377498 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377498 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377498 PE), fluorescein (sc-377498 FITC), Alexa Fluor® 488 (sc-377498 AF488), Alexa Fluor® 546 (sc-377498 AF546), Alexa Fluor® 594 (sc-377498 AF594) or Alexa Fluor® 647 (sc-377498 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377498 AF680) or Alexa Fluor® 790 (sc-377498 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

ZNF271 (A-3) is recommended for detection of ZNF271 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 (A-3) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

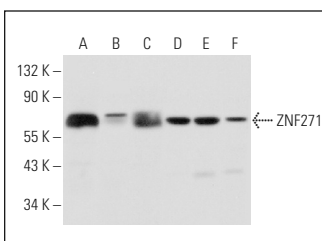
Molecular Weight of ZNF271 isoforms: 76/48 kDa.

Positive Controls: human skeletal muscle extract: sc-363776, Jurkat whole cell lysate: sc-2204 or mouse skeletal muscle extract: sc-364250.

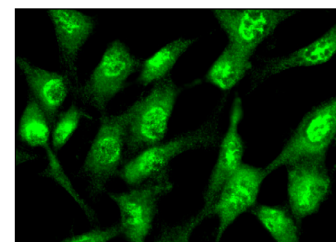
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



ZNF271 (A-3): sc-377498. Western blot analysis of ZNF271 expression in mouse skeletal muscle (A), human skeletal muscle (B) and human fetal muscle (C) tissue extracts and BYDP (D), Jurkat (E) and Hep G2 (F) whole cell lysates.



ZNF271 (A-3): sc-377498. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing nuclear and cytoplasmic localization.

## 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.

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