SANTA CRUZ BIOTECHNOLOGY, INC.

# ZSCAN21 (h): 293T Lysate: sc-116016

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. ZSCAN21, also called ZNF38, Zipro1 or NY-REN-21, is the human homolog of the mouse Zscan21 protein and is a member of the Krüppel $C_2H_2$-type zinc-finger family of transcriptional regulators. Found in proliferating cells, ZSCAN21 is thought to be associated with gametogenesis in females and with meiosis in males. ZSCAN21 has a SCAN domain at the N-terminus and exhibits transcriptional activity by forming either a homodimer or a heterodimer with the protein SCAND1.

## REFERENCES


1. Chowdhury, K., Goulding, M., Walther, C., Imai, K. and Fickenscher, H. 1993. The ubiquitous transactivator ZFP38 is upregulated during spermatogenesis with differential transcription. Mech. Dev. 39: 129-142.
2. Yang, X.W., Wynder, C., Doughty, M.L. and Heintz, N. 1999. BAC-mediated gene-dosage analysis reveals a role for Zipro1 (Ru49/ZFP38) in progenitor cell proliferation in cerebellum and skin. Nat. Genet. 22: 327-335.
3. Carneiro, F.R., Silva, T.C., Alves, A.C., Haline-Vaz, T., Gozzo, F.C. and Zanchin, N.I. 2006. Spectroscopic characterization of the tumor antigen NY-REN-21 and identification of heterodimer formation with SCAND1. Biochem. Biophys. Res. Commun. 343: 260-268.
4. Saydam, O., Steiner, F., Vogt, B. and Schwyzer, M. 2006. Host cell targets of immediate-early protein BICP22 of bovine herpesvirus 1. Vet. Microbiol. 113: 185-192.
5. O'Geen, H., Squazzo, S.L., Iyengar, S., Blahnik, K., Rinn, J.L., Chang, H.Y., Green, R. and Farnham, P.J. 2007. Genome-wide analysis of KAP1 binding suggests autoregulation of KRAB-ZNFs. PLoS Genet. 3: e89.


## CHROMOSOMAL LOCATION

Genetic locus: ZSCAN21 (human) mapping to 7q22.1.

## PRODUCT

ZSCAN21 (h): 293T Lysate represents a lysate of human ZSCAN21 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

ZSCAN21 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive ZSCAN21 antibodies. Recommended use: 10-20 µl per lane.

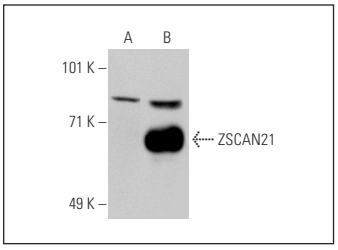
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ZSCAN21 (3418F1a): sc-81142 is recommended as a positive control antibody for Western Blot analysis of enhanced human ZSCAN21 expression in ZSCAN21 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## DATA




ZSCAN21 (3418F1a): sc-81142. Western blot analysis of ZSCAN21 expression in non-transfected: sc-117752 (**A**) and human ZSCAN21 transfected: sc-116016 (**B**) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

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