SANTA CRUZ BIOTECHNOLOGY, INC.

ZSCAN21 (3418F1a): sc-81142

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.

SOURCE

ZSCAN21 (3418F1a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the N-terminal region of ZSCAN21 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

STORAGE

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

APPLICATIONS

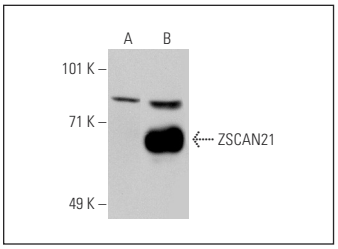
ZSCAN21 (3418F1a) is recommended for detection of ZSCAN21 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for ZSCAN21 siRNA (h): sc-89895, ZSCAN21 shRNA Plasmid (h): sc-89895-SH and ZSCAN21 shRNA (h) Lentiviral Particles: sc-89895-V.

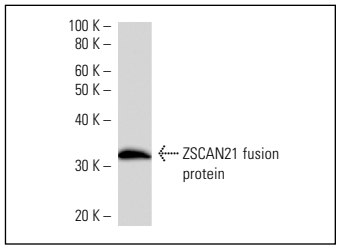
Molecular Weight of ZSCAN21: 54 kDa.

Positive Controls: ZSCAN21 (h): 293T Lysate: sc-116016.

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.



ZSCAN21 (3418F1a): sc-81142. Western Blot analysis of human recombinant ZSCAN21 fusion protein.

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.