

# ZSCAN21 (R-13): sc-104782

## 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<sub>2</sub>H<sub>2</sub>-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 Zfp-38 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 (mouse) mapping to 5 G2.

## SOURCE

ZSCAN21 (R-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZSCAN21 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104782 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

ZSCAN21 (R-13) is recommended for detection of ZSCAN21 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ZSCAN21 siRNA (m): sc-106715, ZSCAN21 shRNA Plasmid (m): sc-106715-SH and ZSCAN21 shRNA (m) Lentiviral Particles: sc-106715-V.

Molecular Weight of ZSCAN21: 54 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.