SANTA CRUZ BIOTECHNOLOGY, INC.

ZSCAN18 (F-20): sc-130043

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. ZSCAN18 (zinc finger and SCAN domain-containing protein 18), also known as ZNF447 (zinc finger protein 447), is a 510 amino acid member of the Krüppel C_2H_2-type zinc finger protein family and is thought to be involved in transcriptional regulation. Localized to the nucleus, ZSCAN18 contains one KRAB domain and two C_2H_2-type zinc fingers through which it may convey DNA, RNA and protein binding capabilities. Two isoforms of ZSCAN18 are expressed due to alternative splicing events.

REFERENCES

1. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
2. Huebner, K., Druck, T., Croce, C.M. and Thiesen, H.J. 1991. Twenty-seven nonoverlapping zinc finger cDNAs from human T cells map to nine different chromosomes with apparent clustering. Am. J. Hum. Genet. 48: 726-740.
3. Abrink, M., Aveskogh, M. and Hellman, L. 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. Williams, A.J., Blacklow, S.C. and Collins, T. 1999. The zinc finger-associated SCAN box is a conserved oligomerization domain. Mol. Cell. Biol. 19: 8526-8535.
5. Shannon, M., Hamilton, A.T., Gordon, L., Branscomb, E. and Stubbs, L. 2003. Differential expansion of zinc-finger transcription factor loci in homologous human and mouse gene clusters. Genome Res. 13: 1097-1110.
6. Englbrecht, C.C., Schoof, H. and Böhm, S. 2004. Conservation, diversification and expansion of C_2H_2 zinc finger proteins in the *Arabidopsis thaliana* genome. BMC Genomics 5: 39-39.

CHROMOSOMAL LOCATION

Genetic locus: ZSCAN18 (human) mapping to 19q13.43.

SOURCE

ZSCAN18 (F-20) is a purified rabbit polyclonal antibody raised against ZSCAN18 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

ZSCAN18 (F-20) is recommended for detection of ZSCAN18 of human and rat 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

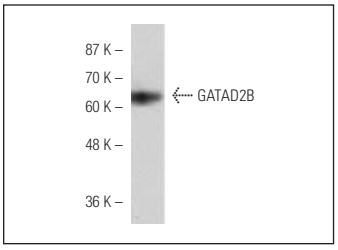
Suitable for use as control antibody for ZSCAN18 siRNA (h): sc-97523, ZSCAN18 shRNA Plasmid (h): sc-97523-SH and ZSCAN18 shRNA (h) Lentiviral Particles: sc-97523-V.

Molecular Weight of ZSCAN18: 55 kDa.

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).

DATA



GATAD2B (U-20): sc-130043. Western blot analysis of GATAD2B expression in transfected 293T whole cell lysate.

PROTOCOLS

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