

ZSCAN2 (Z-20): sc-130003

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. Zinc finger and SCAN domain-containing protein 2 (ZSCAN2), also known as ZNF29, is a 613 amino acid member of the Krüppel C₂H₂-type zinc finger protein family. Localized to the nucleus, ZSCAN2 contains 14 C₂H₂-type zinc fingers at the carboxy-terminus and one SCAN box domain, a leucine rich region of about 80 amino acids, at the amino-terminus through which it is thought to be involved in DNA-binding and transcriptional regulation during the post-meiotic stages of spermatogenesis. Three isoforms of ZSCAN2 exist 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. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. *New Biol.* 2: 363-374.
3. 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.
4. 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.
5. Williams, A.J., Khachigian, L.M., Shows, T. and Collins, T. 1995. Isolation and characterization of a novel zinc-finger protein with transcription repressor activity. *J. Biol. Chem.* 270: 22143-22152.
6. Walter, L. and Günther, E. 2000. Physical mapping and evolution of the centromeric class I gene-containing region of the rat MHC. *Immunogenetics* 51: 829-837.
7. Sander, T.L., Stringer, K.F., Maki, J.L., Szauter, P., Stone, J.R. and Collins, T. 2003. The SCAN domain defines a large family of zinc finger transcription factors. *Gene* 310: 29-38.
8. Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C₂H₂ zinc-finger transcription factors. *Bioinformatics* 24: 1850-1857.

CHROMOSOMAL LOCATION

Genetic locus: ZSCAN2 (human) mapping to 15q25.2.

SOURCE

ZSCAN2 (Z-20) is a purified rabbit polyclonal antibody raised against ZSCAN2 of human origin.

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.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

ZSCAN2 (Z-20) is recommended for detection of ZSCAN2 of human 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 ZSCAN2 siRNA (h): sc-89922, ZSCAN2 shRNA Plasmid (h): sc-89922-SH and ZSCAN2 shRNA (h) Lentiviral Particles: sc-89922-V.

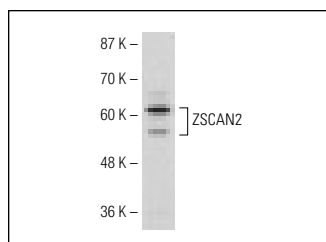
Molecular Weight of ZSCAN2: 69 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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



ZSCAN2 (Z-20): sc-130003. Western blot analysis of ZSCAN2 expression in Jurkat whole cell lysate.

PROTOCOLS

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