SANTA CRUZ BIOTECHNOLOGY, INC.

ZSCAN16 (B-25): sc-130002

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 16 (ZSCAN16), also known as ZNF392 or ZNF435, is a 348 amino acid member of the Krüppel C_2H_2-type zinc finger protein family. Localized to the nucleus, ZSCAN16 contains four C_2H_2-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. ZSCAN16 has been shown to repress reporter gene transcription, and overexpression of ZNF435 also suppressed the transcriptional activities of AP-1μ. Because AP-1μ is activated by MAPK-mediated phosphorylation, ZNF435 is though to be involved in the MAPK pathway.

REFERENCES

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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. Gu, X., Zheng, M., Fei, X., Yang, Z., Li, F., Ji, C., Xie, Y. and Mao, Y. 2007. ZNF435, a novel human SCAN-containing zinc finger protein, inhibits AP-1-mediated transcriptional activation. Mol. Cells 23: 316-322.

CHROMOSOMAL LOCATION

Genetic locus: ZSCAN16 (human) mapping to 6p22.1.

STORAGE

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

PROTOCOLS

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

SOURCE

ZSCAN16 (B-25) is a purified rabbit polyclonal antibody raised against ZSCAN16 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

ZSCAN16 (B-25) is recommended for detection of ZSCAN16 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).

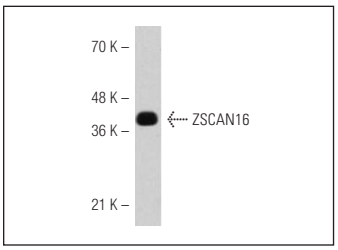
Suitable for use as control antibody for ZSCAN16 siRNA (h): sc-95211, ZSCAN16 shRNA Plasmid (h): sc-95211-SH and ZSCAN16 shRNA (h) Lentiviral Particles: sc-95211-V.

Molecular Weight of ZSCAN16: 41 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



ZSCAN16 (B-25): sc-130002. Western blot analysis of ZSCAN16 expression in transfected 293T whole cell lysate.

RESEARCH USE

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