ZSCAN16 (N-14): sc-132609



The Boures to Overtion

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 4 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-bind ing and transcriptional regulation. ZSCAN16 has been shown to repress reporter gene transcription, and overexpression of ZNF435 also suppressed the transcriptional activities of AP-1 μ . Because AP-1 μ is activated by MAPK-mediated phosphorylation, ZNF435 is though to be involved in the MAPK pathway.

REFERENCES

- Berg, J.M. 1988. Proposed structure for the zinc-binding domains from transcription factor IIIA and related proteins. Proc. Natl. Acad. Sci. USA 85: 99-102.
- 2. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

SOURCE

ZSCAN16 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZSCAN16 of human origin.

RESEARCH USE

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

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-132609 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZSCAN16 (N-14) is recommended for detection of ZSCAN16 of human 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); non cross-reactive with other ZSCAN family members.

ZSCAN16 (N-14) is also recommended for detection of ZSCAN16 in additional species, including porcine.

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 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.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**