SANTA CRUZ BIOTECHNOLOGY, INC.

ZSCAN16 (G-14): sc-132608



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-binding 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

- 1. 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.

CHROMOSOMAL LOCATION

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

SOURCE

ZSCAN16 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZSCAN16 of human 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-132608 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ZSCAN16 (G-14) 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)], 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.

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.

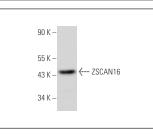
Molecular Weight of ZSCAN16: 41 kDa.

Positive Controls: A549 cell lysate: sc-2413.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ZSCAN16 (G-14): sc-132608. Western blot analysis of ZSCAN16 expression in A549 whole cell lysate.

STORAGE

Store at 4° C, **D0 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.