SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF426 (S-14): sc-169899



The Power to Question

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. ZNF426 (zinc finger protein 426), also known as MGC2663, is a 554 amino acid protein that is thought to be involved in transcriptional regulation. Localized to the nucleus, ZNF426 contains one KRAB domain and 12 C_2H_2 -type zinc fingers through which it may convey DNA, RNA and protein binding capabilities. Specifically, ZNF426 may interact with the viral protein KSHV ORF 50 and, through this interaction, may activate viral gene transcription.

REFERENCES

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- 2. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- 3. Rousseau-Merck, M.F., et al. 1994. Chromosomal localization of 9 KOX zinc finger genes: physical linkages suggest clustering of KOX genes on chromosomes 12, 16, and 19. Hum. Genet. 92: 583-587.
- 4. Williams, A.J., et al. 1999. The zinc finger-associated SCAN box is a conserved oligomerization domain. Mol. Cell. Biol. 19: 8526-8535.
- 5. Wang, S., et al. 2001. Identification of a cellular protein that interacts and synergizes with the RTA (ORF50) protein of Kaposi's sarcoma-associated herpesvirus in transcriptional activation. J. Virol. 75: 11961-11973.
- 6. Shannon, M., et al. 2003. Differential expansion of zinc-finger transcription factor loci in homologous human and mouse gene clusters. Genome Res. 13: 1097-1110.
- 7. Englbrecht, C.C., et al. 2004. Conservation, diversification and expansion of C_2H_2 zinc finger proteins in the *Arabidopsis thaliana* genome. BMC Genomics 5: 39-39.
- Yang, Z., et al. 2007. The transcriptional repressor K-RBP modulates RTAmediated transactivation and lytic replication of Kaposi's sarcoma-associated herpesvirus. J. Virol. 81: 6294-6306.
- Yang, Z., et al. 2008. Kaposi's sarcoma-associated herpesvirus transactivator RTA promotes degradation of the repressors to regulate viral lytic replication. J. Virol. 82: 3590-3603.

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.

CHROMOSOMAL LOCATION

Genetic locus: Zfp426 (mouse) mapping to 9 A3.

SOURCE

ZNF426 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF426 of mouse 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-169899 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNF426 (S-14) is recommended for detection of ZNF426 of mouse and rat 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 ZNF family members.

Suitable for use as control antibody for ZNF426 siRNA (m): sc-155715, ZNF426 shRNA Plasmid (m): sc-155715-SH and ZNF426 shRNA (m) Lentiviral Particles: sc-155715-V.

Molecular Weight of ZNF426: 63 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) Immunofluo-rescence: 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.

RESEARCH USE

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