SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF623 (P-15): sc-87531



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. As a member of the Krüppel C_2H_2 -type zinc-finger protein family, ZNF623 (zinc finger protein 623) is a 536 amino acid nuclear protein that contains thirteen C_2H_2 -type zinc fingers. The gene encoding ZNF623 maps to human chromosome 8, which is made up of nearly 146 million bases and encodes about 800 genes. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

REFERENCES

- 1. Payre, F., et al. 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.
- Rosenfeld, R., et al. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. J. Biomol. Struct. Dyn. 11: 557-570.
- 4. Wildenauer, D.B., et al. 1999. Chromosomes 8 and 10 workshop. Am. J. Med. Genet. 88: 239-243.
- 5. Laity, J.H., et al. 2001. Zinc finger proteins: new insights into structural and functional diversity. Curr. Opin. Struct. Biol. 11: 39-46.
- 6. Edelstein, L.C., et al. 2005. The SCAN domain family of zinc finger transcription factors. Gene 359: 1-17.
- 7. Gamsjaeger, R., et al. 2007. Sticky fingers: zinc-fingers as protein-recognition motifs. Trends Biochem. Sci. 32: 63-70.
- 8. Liu, J., et al. 2008. Context-dependent DNA recognition code for C_2H_2 zinc-finger transcription factors. Bioinformatics 24: 1850-1857.

CHROMOSOMAL LOCATION

Genetic locus: ZNF623 (human) mapping to 8q24.3.

SOURCE

ZNF623 (P-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of ZNF623 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-87531 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-87531 X, 100 $\mu g/0.1$ ml.

APPLICATIONS

ZNF623 (P-15) is recommended for detection of ZNF623 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 ZNF family members.

Suitable for use as control antibody for ZNF623 siRNA (h): sc-77507, ZNF623 shRNA Plasmid (h): sc-77507-SH and ZNF623 shRNA (h) Lentiviral Particles: sc-77507-V.

ZNF623 (P-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZNF623: 61 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) Immunofluo-rescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

RESEARCH USE

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

PROTOCOLS

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