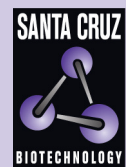


ZNF704 (G-17): sc-87535



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 C₂H₂-type zinc-finger protein family, ZNF704 (zinc finger protein 704) is a 412 amino acid nuclear protein that contains one C₂H₂-type zinc finger. The gene encoding ZNF704 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.
3. 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 C₂H₂ zinc-finger transcription factors. *Bioinformatics* 24: 1850-1857.

CHROMOSOMAL LOCATION

Genetic locus: ZNF704 (human) mapping to 8q21.13; Zfp704 (mouse) mapping to 3 A1.

SOURCE

ZNF704 (G-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of ZNF704 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-87535 P, (100 µg 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-87535 X, 100 µg/0.1 ml.

APPLICATIONS

ZNF704 (G-17) is recommended for detection of ZNF704 of mouse, rat and 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 ZNF family members.

ZNF704 (G-17) is also recommended for detection of ZNF704 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZNF704 siRNA (h): sc-77557, ZNF704 siRNA (m): sc-155783, ZNF704 shRNA Plasmid (h): sc-77557-SH, ZNF704 shRNA Plasmid (m): sc-155783-SH, ZNF704 shRNA (h) Lentiviral Particles: sc-77557-V and ZNF704 shRNA (m) Lentiviral Particles: sc-155783-V.

ZNF704 (G-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

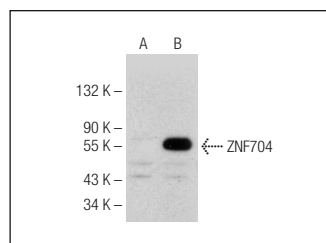
Molecular Weight of ZNF704: 45 kDa.

Positive Controls: ZNF704 (m): 293T Lysate: sc-179795.

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). 3) Immunofluorescence: 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.

DATA



ZNF704 (G-17): sc-87535. Western blot analysis of ZNF704 expression in non-transfected: sc-117752 (A) and mouse ZNF704 transfected: sc-179795 (B) 293T whole cell lysates.

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.