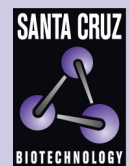


ZNF704 (B-4): sc-514109



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.

CHROMOSOMAL LOCATION

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

SOURCE

ZNF704 (B-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 346-370 near the C-terminus of ZNF704 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-514109 X, 200 µg/0.1 ml.

ZNF704 (B-4) is available conjugated to agarose (sc-514109 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514109 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514109 PE), fluorescein (sc-514109 FITC), Alexa Fluor® 488 (sc-514109 AF488), Alexa Fluor® 546 (sc-514109 AF546), Alexa Fluor® 594 (sc-514109 AF594) or Alexa Fluor® 647 (sc-514109 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514109 AF680) or Alexa Fluor® 790 (sc-514109 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514109 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

ZNF704 (B-4) is recommended for detection of ZNF704 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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 (B-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

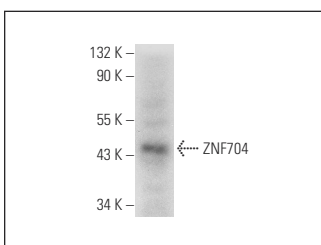
Molecular Weight of ZNF704: 45 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ZNF704 (B-4): sc-514109. Western blot analysis of ZNF704 expression in COLO 320DM whole cell lysate.

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 for detailed protocols and support products.