

ZNF70 (F-8): sc-398828



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, ZNF70 (zinc finger protein 70), also known as zinc finger protein N27C7-1, is a 446 amino acid nuclear protein that contains 11 C₂H₂-type zinc fingers. The gene encoding ZNF70 maps to chromosome 22, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, neurofibromatosis type 2, autism and schizophrenia.

REFERENCES

1. Payre, F. and Vincent, A. 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. Aubry, M., et al. 1992. Cloning of six new genes with zinc finger motifs mapping to short and long arms of human acrocentric chromosome 22 (p and q11.2). *Genomics* 13: 641-648.
4. 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.

CHROMOSOMAL LOCATION

Genetic locus: ZNF70 (human) mapping to 22q11.23.

SOURCE

ZNF70 (F-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 26-41 near the N-terminus of ZNF70 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} 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-398828 X, 200 µg/0.1 ml.

ZNF70 (F-8) is available conjugated to agarose (sc-398828 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398828 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398828 PE), fluorescein (sc-398828 FITC), Alexa Fluor® 488 (sc-398828 AF488), Alexa Fluor® 546 (sc-398828 AF546), Alexa Fluor® 594 (sc-398828 AF594) or Alexa Fluor® 647 (sc-398828 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398828 AF680) or Alexa Fluor® 790 (sc-398828 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398828 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

ZNF70 (F-8) is recommended for detection of ZNF70 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 ZNF70 siRNA (h): sc-76998, ZNF70 shRNA Plasmid (h): sc-76998-SH and ZNF70 shRNA (h) Lentiviral Particles: sc-76998-V.

ZNF70 (F-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

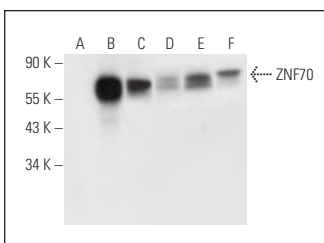
Molecular Weight of ZNF70: 51 kDa.

Positive Controls: ZNF70 (h2): 293 Lysate: sc-158159, Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

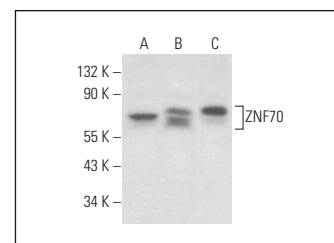
RECOMMENDED SUPPORT REAGENTS

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



ZNF70 (F-8): sc-398828. Western blot analysis of ZNF70 expression in non-transfected 293: sc-110760 (A), human ZNF70 transfected 293: sc-158159 (B), Jurkat (C), COLO 205 (D), Hep G2 (E) and RT-4 (F) whole cell lysates.



ZNF70 (F-8): sc-398828. Western blot analysis of ZNF70 expression in Jurkat (A), MDA-MB-435S (B) and 3T3-L1 (C) 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.

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