

# ZNF296 (C-12): sc-514868

## 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<sub>2</sub>H<sub>2</sub>-type zinc-finger protein family, ZNF342 (zinc finger protein 342), also known as Zinc finger protein 296, is a 475 amino acid nuclear protein that contains 6 C<sub>2</sub>H<sub>2</sub>-type zinc fingers through which it is thought to be involved in DNA-binding and transcriptional regulation.

## 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. Berg, J.M. 1988. Proposed structure for the zinc-binding domains from transcription factor IIIA and related proteins. *Proc. Natl. Acad. Sci. USA* 85: 99-102.
3. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. *New Biol.* 2: 363-374.
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.
5. Abrink, M., et al. 1995. Isolation of cDNA clones for 42 different Krüppel-related zinc finger proteins expressed in the human monoblast cell line U-937. *DNA Cell Biol.* 14: 125-136.
6. Tian, C.Y., et al. 2006. Progress in the study of KRAB zinc finger protein. *Yi Chuan* 28: 1451-1456.

## CHROMOSOMAL LOCATION

Genetic locus: ZNF296 (human) mapping to 19q13.32; Zfp296 (mouse) mapping to 7 A3.

## SOURCE

ZNF296 (C-12) is a mouse monoclonal antibody raised against amino acids 1-202 of ZNF296 of human origin of ZNF296 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZNF296 (C-12) is available conjugated to agarose (sc-514868 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514868 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514868 PE), fluorescein (sc-514868 FITC), Alexa Fluor® 488 (sc-514868 AF488), Alexa Fluor® 546 (sc-514868 AF546), Alexa Fluor® 594 (sc-514868 AF594) or Alexa Fluor® 647 (sc-514868 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514868 AF680) or Alexa Fluor® 790 (sc-514868 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

ZNF296 (C-12) is recommended for detection of ZNF296 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 ZNF296 siRNA (h): sc-97179, ZFP296 siRNA (m): sc-155543, ZNF296 shRNA Plasmid (h): sc-97179-SH, ZFP296 shRNA Plasmid (m): sc-155543-SH, ZNF296 shRNA (h) Lentiviral Particles: sc-97179-V and ZFP296 shRNA (m) Lentiviral Particles: sc-155543-V.

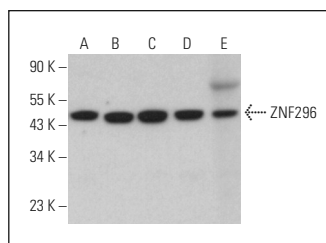
Molecular Weight of ZNF296: 51 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HEK293T whole cell lysate: sc-45137 or HeLa nuclear extract: sc-2120.

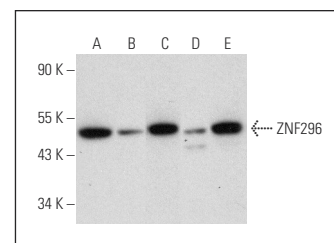
## RECOMMENDED SUPPORT REAGENTS

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



ZNF296 (C-12): sc-514868. Western blot analysis of ZNF296 expression in Hel.92.1.7 (A), RAW 264.7 (B), F9 (C) and KNRK (D) whole cell lysates and rat testis tissue extract (E).



ZNF296 (C-12): sc-514868. Western blot analysis of ZNF296 expression in Jurkat (A), Hep G2 (B) and HEK293T (C) whole cell lysates and A549 (D) and HeLa (E) nuclear extracts.

## 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](http://www.scbt.com) for detailed protocols and support products.