

# ZNF496 (4B2): sc-101083



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. ZNF496 (zinc finger protein 496), also known as ZKSCAN17 or NIZP1, is a 587 amino acid member of the Krüppel C<sub>2</sub>H<sub>2</sub>-type zinc finger protein family and is thought to act as a transcriptional repressor. Localized to the nucleus, ZNF496 contains one SCAN box domain, one KRAB domain and five C<sub>2</sub>H<sub>2</sub>-type zinc fingers through which it may convey DNA, RNA and protein-binding capabilities.

## REFERENCES

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- Williams, A.J., Blacklow, S.C. and Collins, T. 1999. The zinc finger-associated SCAN box is a conserved oligomerization domain. *Mol. Cell. Biol.* 19: 8526-8535.
- Rousseau-Merck, M.F., Koczan, D., Legrand, I., Möller, S., Autran, S. and Thiesen, H.J. 2003. The KOX zinc finger genes: genome wide mapping of 368 ZNF PAC clones with zinc finger gene clusters predominantly in 23 chromosomal loci are confirmed by human sequences annotated in Ensembl. *Cytogenet. Genome Res.* 98: 147-153.
- Englbrecht, C.C., Schoof, H. and Böhm, S. 2004. Conservation, diversification and expansion of C<sub>2</sub>H<sub>2</sub> zinc finger proteins in the *Arabidopsis thaliana* genome. *BMC Genomics* 5: 39.
- Nielsen, A.L., Jørgensen, P., Lerouge, T., Cerviño, M., Chambon, P. and Losson, R. 2004. Nizp1, a novel multitype zinc finger protein that interacts with the NSD1 histone lysine methyltransferase through a unique C2HR motif. *Mol. Cell. Biol.* 24: 5184-5196.

## CHROMOSOMAL LOCATION

Genetic locus: ZNF496 (human) mapping to 1q44; Zkscan17 (mouse) mapping to 11 B1.3.

## SOURCE

ZNF496 (4B2) is a mouse monoclonal antibody raised against recombinant ZNF496 of human origin.

## PRODUCT

Each vial contains 50 µg IgG<sub>2a</sub> in 500 µl PBS with < 0.1% sodium azide and 0.1% gelatin.

## RESEARCH USE

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

## APPLICATIONS

ZNF496 (4B2) is recommended for detection of ZNF496 of mouse 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).

Suitable for use as control antibody for ZNF496 siRNA (h): sc-88120, ZNF496 siRNA (m): sc-155728, ZNF496 shRNA Plasmid (h): sc-88120-SH, ZNF496 shRNA Plasmid (m): sc-155728-SH, ZNF496 shRNA (h) Lentiviral Particles: sc-88120-V and ZNF496 shRNA (m) Lentiviral Particles: sc-155728-V.

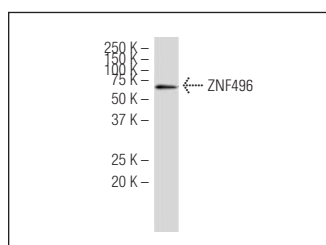
Molecular Weight of ZNF496: 67 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or Hep G2 cell lysate: sc-2227.

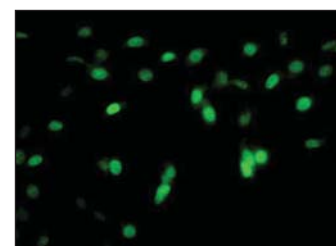
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



ZNF496 (4B2): sc-101083. Western blot analysis of ZNF496 expression in NIH/3T3 whole cell lysate.



ZNF496 (4B2): sc-101083. Immunofluorescence staining of paraformaldehyde-fixed NIH/3T3 cells showing nuclear localization.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.