

ZFP96 (A-6): sc-514909



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. Belonging to the Krüppel C₂H₂-type zinc-finger protein family, ZFP96 (zinc finger protein 96 homolog), also known as ZSCAN12 (zinc finger and SCAN domain-containing protein 12) and zinc finger protein 305, is a 604 amino acid nuclear protein that contains one SCAN box domain and 11 C₂H₂-type zinc fingers. ZFP96 is upregulated by 8-fold from day 13 of pregnancy to day 1 post-partum, suggesting that ZFP96 functions as a transcription factor by switching off pro-survival genes and/or upregulating pro-apoptotic genes of the corpus luteum.

REFERENCES

1. Bellefroid, E.J., et al. 1993. Clustered organization of homologous KRAB zinc-finger genes with enhanced expression in human T lymphoid cells. *EMBO J.* 12: 1363-1374.
2. Ishikawa, K., et al. 1997. Prediction of the coding sequences of unidentified human genes. VIII. 78 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 4: 307-313.
3. Klug, A. 1999. Zinc finger peptides for the regulation of gene expression. *J. Mol. Biol.* 293: 215-218.
4. Weissig, H., et al. 2003. Three novel spermatogenesis-specific zinc finger genes. *FEBS Lett.* 547: 61-68.
5. Mungall, A.J., et al. 2005. Cloning and characterization of a novel zinc finger protein (rZFP96) in the rat corpus luteum. *Biochim. Biophys. Acta* 1732: 69-75.
6. Brown, R.S. 2005. Zinc finger proteins: getting a grip on RNA. *Curr. Opin. Struct. Biol.* 15: 94-98.
7. Hall, T.M. 2005. Multiple modes of RNA recognition by zinc finger proteins. *Curr. Opin. Struct. Biol.* 15: 367-373.
8. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 603978. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim>

CHROMOSOMAL LOCATION

Genetic locus: Zscan12 (mouse) mapping to 13 A3.1.

SOURCE

ZFP96 (A-6) is a mouse monoclonal antibody raised against amino acids 194-272 mapping within an internal region of ZFP96 of mouse 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.

APPLICATIONS

ZFP96 (A-6) is recommended for detection of ZFP96 of mouse 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 ZSCAN12 siRNA (m): sc-155832, ZSCAN12 shRNA Plasmid (m): sc-155832-SH and ZSCAN12 shRNA (m) Lentiviral Particles: sc-155832-V.

Molecular Weight of human ZFP96: 70 kDa.

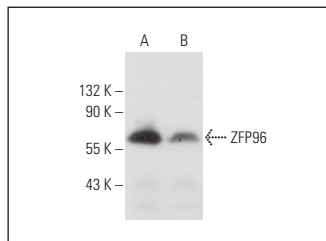
Molecular Weight of mouse ZFP96: 57 kDa.

Positive Controls: F9 cell lysate: sc-2245 or Neuro-2A whole cell lysate: sc-364185.

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



ZFP96 (A-6): sc-514909. Western blot analysis of ZFP96 expression in F9 (A) and Neuro-2A (B) 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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.