

# ZFP96 (G-6): sc-515393

## 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 C<sub>2</sub>H<sub>2</sub>-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 C<sub>2</sub>H<sub>2</sub>-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.

## CHROMOSOMAL LOCATION

Genetic locus: ZSCAN12 (human) mapping to 6p22.1; Zscan12 (mouse) mapping to 13 A3.1.

## SOURCE

ZFP96 (G-6) is a mouse monoclonal antibody raised against amino acids 133-264 mapping within an internal region of ZFP96 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZFP96 (G-6) is available conjugated to agarose (sc-515393 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515393 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515393 PE), fluorescein (sc-515393 FITC), Alexa Fluor® 488 (sc-515393 AF488), Alexa Fluor® 546 (sc-515393 AF546), Alexa Fluor® 594 (sc-515393 AF594) or Alexa Fluor® 647 (sc-515393 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515393 AF680) or Alexa Fluor® 790 (sc-515393 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## RESEARCH USE

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

## APPLICATIONS

ZFP96 (G-6) is recommended for detection of ZFP96 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 ZFP96 siRNA (h): sc-95095, ZSCAN12 siRNA (m): sc-155832, ZFP96 shRNA Plasmid (h): sc-95095-SH, ZSCAN12 shRNA Plasmid (m): sc-155832-SH, ZFP96 shRNA (h) Lentiviral Particles: sc-95095-V and ZSCAN12 shRNA (m) Lentiviral Particles: sc-155832-V.

Molecular Weight of human ZFP96: 70 kDa.

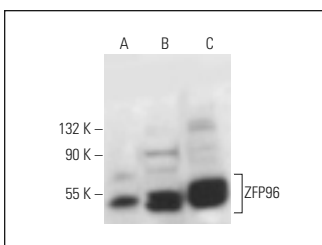
Molecular Weight of mouse ZFP96: 57 kDa.

Positive Controls: ZFP96 (h): 293T Lysate: sc-115746, C6 whole cell lysate: sc-364373 or Neuro-2A whole cell lysate: sc-364185.

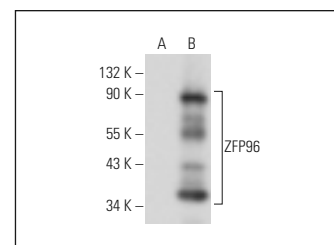
## RECOMMENDED SUPPORT REAGENTS

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 (G-6): sc-515393. Western blot analysis of ZFP96 expression in T98G (A), Neuro-2A (B) and C6 (C) whole cell lysates.



ZFP96 (G-6): sc-515393. Western blot analysis of ZFP96 expression in non-transfected: sc-117752 (A) and human ZFP96 transfected: sc-115746 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Xie, Y.Z., 2017. Knockdown of ZFPL1 results in increased autophagy and autophagy-related cell death in NCI-N87 and BGC-823 human gastric carcinoma cell lines. *Mol. Med. Rep.* 15: 2633-2642.

## STORAGE

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