

ZFP64 (C-3): sc-376131

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. ZFP64 (zinc finger protein 64), also known as ZNF338, is a 681 amino acid homolog of the mouse Zfp64 protein and is a member of the Krüppel C₂H₂-type zinc-finger family. Localized to the nucleus, ZFP64 contains nine C₂H₂-type zinc fingers and is thought to be involved in transcriptional regulation. Four isoforms of ZFP64 exist due to alternative splicing events.

REFERENCES

1. Mack, H.G., Beck, F. and Bowtell, D.D. 1997. A search for a mammalian homologue of the *Drosophila* photoreceptor development gene glass yields ZFP64, a zinc finger encoding gene which maps to the distal end of mouse chromosome 2. *Gene* 185: 11-17.
2. Grishin, A.V., Rothenberg, M., Downs, M.A. and Blumer, K.J. 1998. Mot3, a Zn finger transcription factor that modulates gene expression and attenuates mating pheromone signaling in *Saccharomyces cerevisiae*. *Genetics* 149: 879-892.
3. Deloukas, P., Deloukas, P., Matthews, L.H., Ashurst, J., Burton, J., Gilbert, J.G., Jones, M., Stavrides, G., Almeida, J.P., Babbage, A.K., Bagguley, C.L., Bailey, J., Barlow, K.F., Bates, K.N., Beard, L.M., Beare, D.M., et al. 2001. The DNA sequence and comparative analysis of human chromosome 20. *Nature* 414: 865-871.
4. Borozdin, W., Graham, J.M., Jr., Böhm, D., Bamshad, M.J., Spranger, S., Burke, L., Leipoldt, M. and Kohlhase, J. 2007. Multigene deletions on chromosome 20q13.13-q13.2 including SALL4 result in an expanded phenotype of Okhiro syndrome plus developmental delay. *Hum. Mutat.* 28: 830.
5. Okada, G., Maruo, K., Funada, S. and Nakamura, M. 2008. Differential display analysis of gene expression in female-to-male sex-reversing gonads of the frog *Rana rugosa*. *Gen. Comp. Endocrinol.* 155: 623-634.

CHROMOSOMAL LOCATION

Genetic locus: ZFP64 (human) mapping to 20q13.2; Zfp64 (mouse) mapping to 2 H3.

SOURCE

ZFP64 (C-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 89-125 near the N-terminus of ZFP64 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-376131 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

ZFP64 (C-3) is recommended for detection of ZFP64 of mouse, rat 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 ZFP64 siRNA (h): sc-63241, ZFP64 siRNA (m): sc-63242, ZFP64 shRNA Plasmid (h): sc-63241-SH, ZFP64 shRNA Plasmid (m): sc-63242-SH, ZFP64 shRNA (h) Lentiviral Particles: sc-63241-V and ZFP64 shRNA (m) Lentiviral Particles: sc-63242-V.

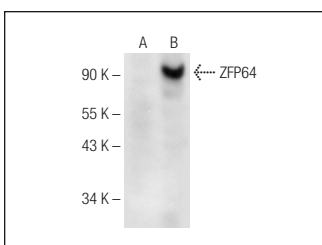
Molecular Weight of ZFP64: 75 kDa.

Positive Controls: ZFP64 (m): 293T Lysate: sc-127809.

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



ZFP64 (C-3): sc-376131. Western blot analysis of ZFP64 expression in non-transfected: sc-117752 (A) and mouse ZFP64 transfected: sc-127809 (B) 293T 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.