

ZFP64 (N-20): sc-68000

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

- 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.
- 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.
- 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.
- 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 Okihiro syndrome plus developmental delay. *Hum. Mutat.* 28: 830-830.
- 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.

SOURCE

ZFP64 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ZFP64 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68000 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZFP64 (N-20) is recommended for detection of ZFP64 of human and, to a lesser extent, rat 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).

ZFP64 (N-20) is also recommended for detection of ZFP64 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZFP64 siRNA (h): sc-63241, ZFP64 shRNA Plasmid (h): sc-63241-SH and ZFP64 shRNA (h) Lentiviral Particles: sc-63241-V.

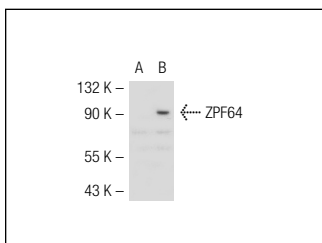
Molecular Weight of ZFP64: 75 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ZFP64 (N-20): sc-68000. 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.