

DZIP1 (N-14): sc-84090

BACKGROUND

DZIP1 (DAZ interacting protein 1) is also known as DZIP or DZIP2 and is a 867 amino acid protein which is expressed as 3 isoforms, designated DZIPb, DZIPt1 and DZIPt2. DZIP1 is localized to testis, oocytes, ovary and fetal brain, as well as in embryonic stem cells and germ cells. In testis, DZIP1 is localized to the nucleus and also shows some cytoplasmic distribution in spermatogonia. DZIP1 belongs to the C₂H₂-type zinc finger protein family, and, characteristic of the C₂H₂-type zinc-finger protein family, DZIP1 contains one C₂H₂-type zinc finger region through which it is thought to interact with DAZ, an interaction that promotes spermiogenesis. DZIP1 expression is not found in those afflicted with Sertoli cell-only syndrome (characterized by the absence of germ cells in the testis), suggesting that the lack of DZIP1 may be involved in the pathogenesis of Sertoli cell-only syndrome-induced male sterility.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608671. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Sekimizu, K., Nishioka, N., Sasaki, H., Takeda, H., Karlstrom, R.O. and Kawakami, A. 2004. The zebrafish iguana locus encodes DZIP1, a novel zinc-finger protein required for proper regulation of hedgehog signaling. *Development* 131: 2521-2532.
3. Wolff, C., Roy, S., Lewis, K.E., Schauerte, H., Joerg-Rauch, G., Kirn, A., Weiler, C., Geisler, R., Haffter, P. and Ingham, P.W. 2004. Iguana encodes a novel zinc-finger protein with coiled-coil domains essential for hedgehog signal transduction in the zebrafish embryo. *Genes Dev.* 18: 1565-1576.
4. Moore, F.L., Jaruzelska, J., Dorfman, D.M. and Reijo-Pera, R.A. 2004. Identification of a novel gene, DZIP (DAZ-interacting protein), that encodes a protein that interacts with DAZ (deleted in azoospermia) and is expressed in embryonic stem cells and germ cells. *Genomics* 83: 834-843.
5. Curry, B.J., Holt, J.E., McLaughlin, E.A. and Aitken, R.J. 2006. Characterization of structure and expression of the DZIP1 gene in the rat and mouse. *Genomics* 87: 275-285.
6. Sun, T., Xin, Z., Jin, Z., Wu, Y. and Gong, Y. 2008. Effect of TGFβ/Smad signaling on Sertoli cell and possible mechanism related to complete Sertoli cell-only syndrome. *Mol. Cell. Biochem.* 319: 1-7.

CHROMOSOMAL LOCATION

Genetic locus: DZIP1 (human) mapping to 13q32.1; Dzip1 (mouse) mapping to 14 E4.

SOURCE

DZIP1 (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of DZIP1 of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84090 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DZIP1 (N-14) is recommended for detection of DZIP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

DZIP1 (N-14) is also recommended for detection of DZIP1 in additional species, including equine and porcine.

Suitable for use as control antibody for DZIP1 siRNA (h): sc-105317, DZIP1 siRNA (m): sc-143212, DZIP1 shRNA Plasmid (h): sc-105317-SH, DZIP1 shRNA Plasmid (m): sc-143212-SH, DZIP1 shRNA (h) Lentiviral Particles: sc-105317-V and DZIP1 shRNA (m) Lentiviral Particles: sc-143212-V.

Molecular Weight of DZIP1: 96 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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



Try **DZIP1 (C-7): sc-515454**, our highly recommended monoclonal alternative to DZIP1 (N-14).