## SANTA CRUZ BIOTECHNOLOGY, INC.

# ZNF268 (D-15): sc-169891



## 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. Zinc finger protein 268 (ZNF268), also known as zinc finger protein 3 or HZF3, is a 947 amino acid protein belonging to the krüppel  $C_2H_2$ -type zinc-finger protein family. ZNF268 contains 24  $C_2H_2$ -type zinc fingers and one KRAB domain. Localized to the nucleus, ZNF268 is involved in transcriptional regulation and is highly expressed in three to five week old embryos. ZNF268 has been implicated in human leukemia, due to the identification of an alternatively spliced form in leukemia patients. Two named isoforms of ZNF268 exist as a result of alternative splicing events.

#### REFERENCES

- 1. Sun, Y., Gou, D.M., Liu, H., Peng, X. and Li, W.X. 2003. The KRAB domain of zinc finger gene ZNF268: a potential transcriptional repressor. IUBMB Life 55: 127-131.
- Sun, Y., Shao, H., Li, Z., Liu, J., Gao, L., Peng, X., Meng, Y. and Li, W. 2004. ZNF268, a novel krüppel-like zinc finger protein, is implicated in early human liver development. Int. J. Mol. Med. 14: 971-975.
- Peng, X., Sun, Y., Liu, H., Gou, D.M. and Li, W.X. 2004. Cloning and functional analysis of the promoter of ZNF268 gene. Yi Chuan Xue Bao 31: 221-226.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 604753. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Shao, H., Zhu, C., Zhao, Z., Guo, M., Qiu, H., Liu, H., Wang, D., Xue, L., Gao, L., Sun, C. and Li, W. 2006. KRAB-containing zinc finger gene ZNF268 encodes multiple alternatively spliced isoforms that contain transcription regulatory domains. Int. J. Mol. Med. 18: 457-463.
- Zhu, C., Zhao, Z., Guo, M., Shao, H., Qiu, H., Wang, D., Xu, J., Xue, L. and Li, W. 2008. The mammalian gene ZNF268 is regulated by hUpf1. Biochemistry 73: 881-885.

#### CHROMOSOMAL LOCATION

Genetic locus: ZNF268 (human) mapping to 12q24.33.

#### SOURCE

ZNF268 (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF268 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169891 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ZNF268 (D-15) is recommended for detection of ZNF268 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); non cross-reactive with other ZNF family members.

Suitable for use as control antibody for ZNF268 siRNA (h): sc-96152, ZNF268 shRNA Plasmid (h): sc-96152-SH and ZNF268 shRNA (h) Lentiviral Particles: sc-96152-V.

Molecular Weight of ZNF268: 108 kDa.

Positive Controls: A-375 cell lysate: sc-3811.

## **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

### DATA



ZNF268 (D-15): sc-169891. Western blot analysis of ZNF268 expression in A375 whole cell lysate.

#### **STORAGE**

Store at 4° C, \*\*D0 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 or our catalog for detailed protocols and support products.