# SANTA CRUZ BIOTECHNOLOGY, INC.

# ZNF509 (3502C2a): sc-81144



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. ZNF509 is a zinc finger protein belonging to the Krüppel  $C_2H_2$ -type zinc-finger protein family. It localizes to the nucleus and may play a role in transcriptional regulation. ZNF509 is a 765 amino acid long protein that contains seven  $C_2H_2$ -type zinc fingers and one BTB (POZ) domain.

#### REFERENCES

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- Englbrecht, C.C., Schoof, H. and Böhm, S. 2004. Conservation, diversification and expansion of C<sub>2</sub>H<sub>2</sub> zinc finger proteins in the *Arabidopsis thaliana* genome. BMC Genomics 5: 39.
- Li, Y., Du, X., Li, F., Deng, Y., Yang, Z., Wang, Y., Pen, Z., Wang, Z., Yuan, W., Zhu, C. and Wu, X. 2006. A novel zinc-finger protein ZNF436 suppresses transcriptional activities of AP-1 and SRE. Mol. Biol. Rep. 33: 287-294.
- Zhong, Z., Wan, B., Qiu, Y., Ni, J., Tang, W., Chen, X., Yang, Y., Shen, S., Wang, Y., Bai, M., Lang, Q. and Yu, L. 2007. Identification of a novel human zinc finger gene, ZNF438, with transcription inhibition activity. J. Biochem. Mol. Biol. 40: 517-524.
- O'Geen, H., Squazzo, S.L., Iyengar, S., Blahnik, K., Rinn, J.L., Chang, H.Y., Green, R. and Farnham, P.J. 2007. Genome-wide analysis of KAP1 binding suggests autoregulation of KRAB-ZNFs. PLoS Genet. 3: e89.

#### CHROMOSOMAL LOCATION

Genetic locus: ZNF509 (human) mapping to 4p16.3.

## SOURCE

ZNF509 (3502C2a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to an internal region of ZNF509 of human origin.

## PRODUCT

Each vial contains 100  $\mu g$   $lgG_1$  in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

#### **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.

# APPLICATIONS

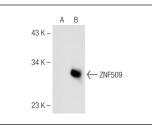
ZNF509 (3502C2a) is recommended for detection of ZNF509 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)].

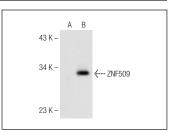
Suitable for use as control antibody for ZNF509 siRNA (h): sc-88959, ZNF509 shRNA Plasmid (h): sc-88959-SH and ZNF509 shRNA (h) Lentiviral Particles: sc-88959-V.

Molecular Weight of ZNF509: 85 kDa.

Positive Controls: ZNF509 (h): 293T Lysate: sc-113645 or LNCaP cell lysate: sc-2231.

#### DATA





ZNF509 (3502C2a): sc-81144. Western blot analysis of ZNF509 expression in non-transfected: sc-117752 (A) and mouse ZNF509 transfected: sc-124802 (B) 293T whole cell lysates.

ZNF509 (3502C2a): sc-81144. Western blot analysis of ZNF509 expression in non-transfected: sc-117752 (**A**) and human ZNF509 transfected: sc-113645 (**B**) 293T whole cell lysates.

#### PROTOCOLS

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