ZNF509 (H-80): sc-98282



The Power to Question

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 $\rm C_2H_2$ -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 7 $\rm C_2H_2$ -type zinc fingers and one BTB (POZ) domain.

REFERENCES

- 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.
- Nakamura, M., Runko, A.P. and Sagerström, C.G. 2004. A novel subfamily of zinc finger genes involved in embryonic development. J. Cell. Biochem. 93: 887-895.
- Englbrecht, C.C., Schoof, H. and Böhm, S. 2004. Conservation, diversification and expansion of C₂H₂ 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; Zfp509 (mouse) mapping to 5 B3.

SOURCE

ZNF509 (H-80) is a rabbit polyclonal antibody raised against amino acids 41-120 mapping near the N-terminus of ZNF509 of human origin.

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98282 X, 200 $\mu g/0.1$ ml.

STORAGE

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

APPLICATIONS

ZNF509 (H-80) is recommended for detection of ZNF509 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).

ZNF509 (H-80) is also recommended for detection of ZNF509 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ZNF509 siRNA (h): sc-88959, ZNF509 siRNA (m): sc-106716, ZNF509 shRNA Plasmid (h): sc-88959-SH, ZNF509 shRNA Plasmid (m): sc-106716-SH, ZNF509 shRNA (h) Lentiviral Particles: sc-88959-V and ZNF509 shRNA (m) Lentiviral Particles: sc-106716-V.

ZNF509 (H-80) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

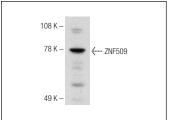
Molecular Weight of ZNF509: 85 kDa.

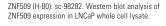
Positive Controls: LNCaP cell lysate: sc-2231.

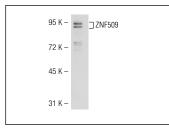
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA







ZNF509 (H-80): sc-98282. Western blot analysis of ZNF509 expression in 293T whole cell lysate.

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.