

ZNF191 (25-G): sc-101079

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. ZNF24 (zinc finger protein 24), also known as ZNF191, KOX17, ZSCAN3 or RSG-A, is a 368 amino acid nuclear protein that belongs to the Krüppel C₂H₂-type zinc-finger protein family. Expressed in tissues throughout the body with the exception of heart, ZNF24 functions as a transcriptional repressor for a variety of proteins, such as VEGF (vascular endothelial growth factor), and is thought to be important for early embryonic development and cell proliferation. ZNF24 contains four C₂H₂-type zinc fingers and one SCAN box domain and, upon DNA damage, may be phosphorylated by ATM or ATR.

REFERENCES

1. Rousseau-Merck, M.F., et al. 1991. Chromosomal localization of two human zinc finger protein genes, ZNF24 (KOX17) and ZNF29 (KOX26), to 18q12 and 17p13-p12, respectively. *Genomics* 9: 154-161.
2. Shi, S.L., et al. 1998. Assignment of a novel zinc finger gene ZNF191 to human chromosome 18Q12.1 by human/rodent somatic cell hybrid panel and fluorescent *in situ* hybridization. *Shi Yan Sheng Wu Xue Bao* 31: 21-27.
3. Han, Z.G., et al. 1999. Molecular cloning of six novel Krüppel-like zinc finger genes from hematopoietic cells and identification of a novel transregulatory domain KRNB. *J. Biol. Chem.* 274: 35741-35748.
4. Williams, A.J., et al. 1999. The zinc finger-associated SCAN box is a conserved oligomerization domain. *Mol. Cell. Biol.* 19: 8526-8535.
5. Li, J.Z., et al. 2004. Establishment of transgenic mice carrying gene encoding human zinc finger protein 191. *World J. Gastroenterol.* 10: 264-267.
6. Li, J., et al. 2006. The zinc finger transcription factor 191 is required for early embryonic development and cell proliferation. *Exp. Cell Res.* 312: 3990-3998.
7. Harper, J., et al. 2007. Repression of vascular endothelial growth factor expression by the zinc finger transcription factor ZNF24. *Cancer Res.* 67: 8736-8741.
8. Zhao, D.X., et al. 2007. Overexpression and purification of single zinc finger peptides of human zinc finger protein ZNF191. *Protein Expr. Purif.* 53: 232-237.

CHROMOSOMAL LOCATION

Genetic locus: ZNF24 (human) mapping to 18q12.2.

SOURCE

ZNF24 (25-G) is a mouse monoclonal antibody raised against recombinant ZNF24 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ZNF24 (25-G) is recommended for detection of ZNF24 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZNF24 siRNA (h): sc-76969, ZNF24 shRNA Plasmid (h): sc-76969-SH and ZNF24 shRNA (h) Lentiviral Particles: sc-76969-V.

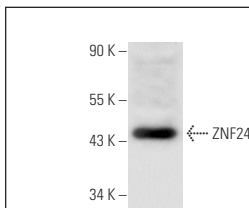
Molecular Weight of ZNF24: 45 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or Jurkat whole cell lysate: sc-2204.

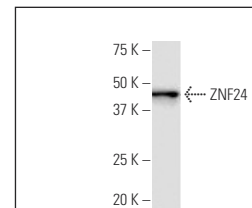
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ZNF24 (25-G): sc-101079. Western blot analysis of ZNF24 expression in Jurkat whole cell lysate.



ZNF24 (25-G): sc-101079. Western blot analysis of ZNF24 expression in HeLa nuclear extract.

SELECT PRODUCT CITATIONS

1. Ren, Y.R., et al. 2012. Unbiased discovery of interactions at a control locus driving expression of the cancer-specific therapeutic and diagnostic target, mesothelin. *J. Proteome Res.* 11: 5301-5310.

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.

PROTOCOLS

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