

ZNF24 (25): sc-136437



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 krueppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. ZNF191 (Zinc finger protein 191), also known as ZNF24, KOX17, ZSCAN3 or RSG-A, is a 368 amino acid nuclear protein that belongs to the krueppel C₂H₂-type zinc-finger protein family. Expressed in tissues throughout the body with the exception of heart, ZNF191 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. ZNF191 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; Zfp24 (mouse) mapping to 18 B1.

SOURCE

ZNF24 (25) is a mouse monoclonal antibody raised against amino acids 136-253 of ZNF24 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ZNF24 (25) is recommended for detection of ZNF24 of mouse, rat, human and canine 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 immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for ZNF24 siRNA (h): sc-76969, ZNF24 siRNA (m): sc-76970, ZNF24 shRNA Plasmid (h): sc-76969-SH, ZNF24 shRNA Plasmid (m): sc-76970-SH, ZNF24 shRNA (h) Lentiviral Particles: sc-76969-V and ZNF24 shRNA (m) Lentiviral Particles: sc-76970-V.

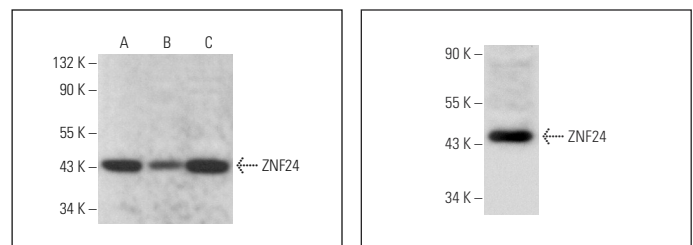
Molecular Weight of ZNF24: 45 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, MCF7 whole cell lysate: sc-2106 or CCRF-CEM cell lysate: sc-2225.

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, 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ZNF24 (25): sc-136437. Western blot analysis of ZNF24 expression in Jurkat (A), MCF7 (B) and CCRF-CEM (C) whole cell lysates.

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

STORAGE

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

PROTOCOLS

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