

# ZNF24 (H-11): sc-393359

## 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 C<sub>2</sub>H<sub>2</sub>-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 C<sub>2</sub>H<sub>2</sub>-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.

## CHROMOSOMAL LOCATION

Genetic locus: ZNF24 (human) mapping to 18q12.2; Zfp24 (mouse) mapping to 18 A2.

## SOURCE

ZNF24 (H-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 121-138 within an internal region of ZNF24 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZNF24 (H-11) is available conjugated to agarose (sc-393359 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393359 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393359 PE), fluorescein (sc-393359 FITC), Alexa Fluor® 488 (sc-393359 AF488), Alexa Fluor® 546 (sc-393359 AF546), Alexa Fluor® 594 (sc-393359 AF594) or Alexa Fluor® 647 (sc-393359 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393359 AF680) or Alexa Fluor® 790 (sc-393359 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393359 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

ZNF24 (H-11) is recommended for detection of ZNF24 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

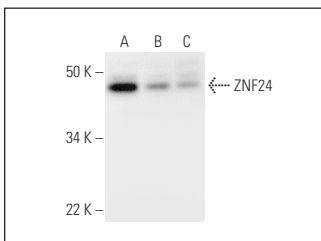
Molecular Weight of ZNF24: 45 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, THP-1 nuclear extract: sc-24963 or HeLa nuclear extract: sc-2120.

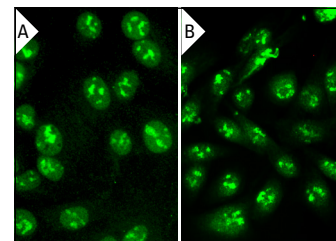
## RECOMMENDED SUPPORT REAGENTS

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). 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 (H-11): sc-393359. Western blot analysis of ZNF24 expression in Jurkat (A), THP-1 (B) and HeLa (C) nuclear extracts.



ZNF24 (H-11): sc-393359. Immunofluorescence staining of methanol-fixed Hep G2 cells showing nucleolar and nuclear localization (A). Immunofluorescence staining of formalin-fixed SW480 cells showing nucleolar and nuclear localization (B).

## 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](http://www.scbt.com) for detailed protocols and support products.