



## ZNF354A (Y-12): sc-107332

### BACKGROUND

ZNF354A, also called EZNF, KID-1 or TCF17, belongs to the Krüppel C<sub>2</sub>H<sub>2</sub>-type zinc finger family of proteins that contain KRAB domains and act as transcriptional regulators. Expressed primarily in the adult kidney, ZNF354A is a transcriptional repressor that plays a role in late renal development and is suppressed after renal ischemia. The N-terminus of ZNF354A contains the KRAB domain which confers transcriptional repressor activity, while the C-terminus contains multiple Cys<sub>2</sub>His<sub>2</sub>-zinc fingers. ZNF354A is located in the nucleolus and is thought to specifically influence development of the proximal tubule by shutting off dispensable or inhibitory genes. Reduced ZNF354A expression prevents proper cell differentiation and may, therefore, be implicated in renal carcinoma.

### REFERENCES

- Witzgall, R., O'Leary, E., Gessner, R., Ouellette, A.J. and Bonventre, J.V. 1993. Kid-1, a putative renal transcription factor: regulation during ontogeny and in response to ischemia and toxic injury. *Mol. Cell. Biol.* 13: 1933-1942.
- Omori, Y., Kyushiki, H., Takeda, S., Suzuki, M., Kawai, A., Fujiwara, T., Takahashi, E. and Nakamura, Y. 1998. Cloning, expression and mapping of a novel human zinc-finger gene TCF17 homologous to rodent Kid-1. *Cytogenet. Cell Genet.* 78: 285-288.
- Witzgall, R., Obermüller, N., Böhlitz, U., Calvet, J.P., Walker, C., Kriz, W., Gretz, N. and Bonventre, J.V. 1999. Kid-1 expression is high in differentiated renal proximal tubule cells and suppressed in cyst epithelia. *Am. J. Physiol.* 275: 928-937
- Jacob, A.N., Manjunath, N.A., Bray-Ward, P. and Kandpal, R.P. 1999. Molecular cloning of a zinc finger gene eZNF from a human inner ear cDNA library, and *in situ* expression pattern of its mouse homologue in mouse inner ear. *Somat. Cell Mol. Genet.* 24: 121-129.
- Huang, Z., Philippin, B., O'Leary, E., Bonventre, J.V., Kriz, W. and Witzgall, R. 1999. Expression of the transcriptional repressor protein Kid-1 leads to the disintegration of the nucleolus. *J. Biol. Chem.* 274: 7640-7648.
- Tekki-Kessararis, N., Bonventre, J.V. and Boulter, C.A. 2000. Characterization of the mouse Kid1 gene and identification of a highly related gene, Kid2. *Gene* 240: 13-22.
- Bugert, P., Pesti, T. and Kovacs, G. 2000. The TCF17 gene at chromosome 5q is not involved in the development of conventional renal cell carcinoma. *Int. J. Cancer.* 86: 806-810.
- Azzouz, T.N., Gruber, A. and Schümperli, D. 2005. U7 snRNP-specific Lsm11 protein: dual binding contacts with the 100 kDa zinc finger processing factor (ZFP100) and a ZFP100-independent function in histone RNA 3' end processing. *Nucleic Acids Res.* 33: 2106-2117.

### CHROMOSOMAL LOCATION

Genetic locus: Zfp354a (mouse) mapping to 11 B1.3.

### STORAGE

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

### SOURCE

ZNF354A (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF354A of mouse origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-107332 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

ZNF354A (Y-12) is recommended for detection of ZNF354A of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other ZNF family members.

Suitable for use as control antibody for ZNF354A siRNA (m): sc-155694, ZNF354A shRNA Plasmid (m): sc-155694-SH and ZNF354A shRNA (m) Lentiviral Particles: sc-155694-V.

Molecular Weight of ZNF354A: 69 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### 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) or our catalog for detailed protocols and support products.