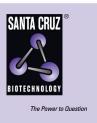
SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF354A (149C1a): sc-81140



BACKGROUND

ZNF354A, also called EZNF, KID-1 or TCF17, belongs to the Kruppel C_2H_2 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 Cterminus contains multiple Cys₂His₂ 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 Kid1. Cytogenet. Cell Genet. 78: 285-288.
- Witzgall, R., Obermüller, N., Bölitz, 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: F928-F937.
- 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-Kessaris, 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.
- 7. 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: ZNF354A (human) mapping to 5q35.3.

SOURCE

ZNF354A (149C1a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to an internal region of ZNF354A of human origin.

PRODUCT

Each vial contains 100 $\mu g~lgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

APPLICATIONS

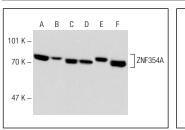
ZNF354A (149C1a) is recommended for detection of ZNF354A of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

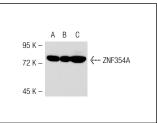
Suitable for use as control antibody for ZNF354A siRNA (h): sc-91974, ZNF354A shRNA Plasmid (h): sc-91974-SH and ZNF354A shRNA (h) Lentiviral Particles: sc-91974-V.

Molecular Weight of ZNF354A: 69 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or HEK293 whole cell lysate: sc-45136.

DATA





ZNF354A (149C1a): sc-81140. Western blot analysis of ZNF354A expression in HeLa (A), Jurkat (B), MCF7 (C) and DU 145 (D) nuclear extracts and Caki-1 (E) and HEX233 (F) whole cell lysates.

ZNF354A (149C1a): sc-81140. Western blot analysis of ZNF354A expression in non-transfected: sc-117752 (A) and mouse ZNF354A transfected: sc-126284 (B) 293T whole cell lysates and HeLa nuclear extract (C).

STORAGE

Store at 4° C, **D0 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.