



ZNF354A siRNA (m): sc-155694

BACKGROUND

ZNF354A, also called EZNF, KID-1 or TCF17, belongs to the Kruppel C₂H₂-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 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

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6. Tekki-Kessaris, N., Bonventre, J.V. and Boulter, C.A. 1999. Characterization of the mouse Kid1 gene and identification of a highly related gene, Kid2. *Gene* 240: 13-22.
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CHROMOSOMAL LOCATION

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

PROTOCOLS

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

PRODUCT

ZNF354A siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see ZNF354A shRNA Plasmid (m): sc-155694-SH and ZNF354A shRNA (m) Lentiviral Particles: sc-155694-V as alternate gene silencing products.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNase-free water provided. Resuspension of the siRNA duplex in 330 µl of RNase-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

ZNF354A siRNA (m) is recommended for the inhibition of ZNF354A expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor ZNF354A gene expression knockdown using RT-PCR Primer: ZNF354A (m)-PR: sc-155694-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

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