SANTA CRUZ BIOTECHNOLOGY, INC.

MAP17 siRNA (m): sc-72181

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The Power to Question

BACKGROUND

MAP17, also known as small PDZK1-associated protein (SPAP) and DD96, exists as a non-glycosylated membrane protein associated with various human carcinomas. MAP17 is also expressed in the proximal tubules of the kidney cortex and in the spermatids of the seminiferous tubules. MAP17 interacts with PDZK1, associates with the N-terminus of NaP(i)-IIa within the PDZK1/NaP(i)-IIa/MAP17 complex, and acts as an apical anchoring site for PDZK1.

REFERENCES

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3. Kocher, O., Comella, N., Gilchrist, A., Pal, R., Tognazzi, K., Brown, L.F. and Knoll, J.H. 1999. PDZK1, a novel PDZ domain-containing protein upregulated in carcinomas and mapped to chromosome 1q21, interacts with cMOAT (MRP2), the multidrug resistance-associated protein. Lab. Invest. 79: 1161-1170.
4. Pribanic, S., Gisler, S.M., Bacic, D., Madjdpour, C., Hernando, N., Sorribas, V., Gantenbein, A., Biber, J. and Murer, H. 2003. Interactions of MAP17 with the NaPi-IIa/PDZK1 protein complex in renal proximal tubular cells. Am. J. Physiol. Renal Physiol. 285: F784-F791.
5. Blasco, T., Aramayona, J.J., Alcalde, A.I., Catalán, J., Sarasa, M. and Sorribas, V. 2003. Rat kidney MAP17 induces cotransport of Na/mannose and Na/glucose in *Xenopus laevis* oocytes. Am. J. Physiol. Renal Physiol. 285: F799-F810.
6. Silver, D.L., Wang, N. and Vogel, S. 2003. Identification of small PDZK1-associated protein, DD96/MAP17, as a regulator of PDZK1 and plasma high density lipoprotein levels. J. Biol. Chem. 278: 28528-28532.

CHROMOSOMAL LOCATION

Genetic locus: Pdzk1ip1 (mouse) mapping to 4 D1.

PRODUCT

MAP17 siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs 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 MAP17 shRNA Plasmid (m): sc-72181-SH and MAP17 shRNA (m) Lentiviral Particles: sc-72181-V as alternate gene silencing products.

For independent verification of MAP17 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-72181A, sc-72181B and sc-72181C.

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

MAP17 siRNA (m) is recommended for the inhibition of MAP17 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 MAP17 gene expression knockdown using RT-PCR Primer: MAP17 (m)-PR: sc-72181-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.

PROTOCOLS

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