SANTA CRUZ BIOTECHNOLOGY, INC.

FATP6 siRNA (m): sc-145083

BACKGROUND

A significant source of energy for most organisms is derived from long chain fatty acids (LCFAs), which can diffuse through the plasma membrane. The transport of LCFAs is also facilitated by a family of fatty acid transport proteins (FATPs), which includes at least five distinct family members in mice and six distinct family members in human. Both human and mouse FATPs are detected in adipose tissue, liver, heart, and kidney. FATP6 (Fatty acid transporter 6), also known as SLC27A6 (Solute carrier family 27, member 6), is a 619 amino acid membrane protein that does not transport fatty acids with a chain length shorter than C10. FATP6 shows a higher preference for palmitate and linoleate acid than FATP4. Predominantly expressed in heart, FATP6 is also present at lower levels in testis, kidney, uterus, bladder, adrenal gland and placenta.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Slc27a6 (mouse) mapping to 18 D3.

PRODUCT

FATP6 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 FATP6 shRNA Plasmid (m): sc-145083-SH and FATP6 shRNA (m) Lentiviral Particles: sc-145083-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

FATP6 siRNA (m) is recommended for the inhibition of FATP6 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 FATP6 gene expression knockdown using RT-PCR Primer: FATP6 (m)-PR: sc-145083-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.