

OST β siRNA (h): sc-90205

BACKGROUND

The heteromeric transporter OST α /OST β facilitates the transport of bile and other steroid solutes across the basolateral epithelial cell membrane of intestine, liver, testis, kidney and adrenal gland. OST α /OST β expression is induced by bile acids through ligand-dependent transactivation of their genes by FXR (farnesoid X-activated receptor). This genetic regulation suggests that in response to changes in intracellular bile acid levels, bile acids adjust the rate of their own efflux from enterocytes. OST β is a 128 amino acid single-pass transmembrane protein that requires OST α to localize to the plasma membrane. Coexpression of OST α and OST β is also required to convert the OST α subunit to a mature glycosylated endoglycosidase H-resistant form, suggesting that co-expression facilitates trafficking of OST α through the golgi apparatus. Though widely expressed, OST β is present at highest levels in ileum.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC51B (human) mapping to 15q22.31.

PROTOCOLS

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

PRODUCT

OST β siRNA (h) is a pool of 2 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see OST β shRNA Plasmid (h): sc-90205-SH and OST β shRNA (h) Lentiviral Particles: sc-90205-V as alternate gene silencing products.

For independent verification of OST β (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-90205A and sc-90205B.

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

APPLICATIONS

OST β siRNA (h) is recommended for the inhibition of OST β expression in human 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 μ M in 66 μ l. 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.

RESEARCH USE

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