SANTA CRUZ BIOTECHNOLOGY, INC.

Arylsulfatase J siRNA (m): sc-141285

BACKGROUND

Arylsulfatase J, also known as ARSJ, is a 599 amino acid secreted protein that belongs to the sulfatase family and uses calcium as a cofactor to catalyze the hydrolysis of sulfate esters from carbohydrates, proteoglycans, sulfated steroids and glycolipids. Via its catalytic activity, Arylsulfatase J may be involved in a variety of cellular processes, including the modulation of cell signaling, the degradation of macromolecules and hormone biosynthesis. The gene encoding Arylsulfatase J maps to human chromosome 4q26, which encodes nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Arsj (mouse) mapping to 3 G1.

PRODUCT

Arylsulfatase J 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 Arylsulfatase J shRNA Plasmid (m): sc-141285-SH and Arylsulfatase J shRNA (m) Lentiviral Particles: sc-141285-V as alternate gene silencing products.

PROTOCOLS

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

Arylsulfatase J siRNA (m) is recommended for the inhibition of Arylsulfatase J 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 Arylsulfatase J gene expression knockdown using RT-PCR Primer: Arylsulfatase J (m)-PR: sc-141285-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.