SANTA CRUZ BIOTECHNOLOGY, INC.

HCII siRNA (m): sc-145906

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Heparin Cofactor II (HCII) is a glycoprotein in human plasma which rapidly inactivates Thrombin in the presence of dermatan sulfate. Inhibition occurs by formation of a stable equimolar complex between HCII and Thrombin. Certain clinical conditions, such as hepatic failure, disseminated intravascular coagulation, thalasemina and sickle cell anemia, display reduced levels of HCII. However, during pregnancy, physiological levels of HCII expression are elevated. HCII may regulate coagulation and may participate in processes such as inflammation, atherosclerosis and wound repair. HCII is widely distributed among vertebrates and may have a common function in birds, amphibians and mammals. The HCFII gene located on human chromosome 22q11, encodes the HCII protein.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Serpind1 (mouse) mapping to 16 A3.

PROTOCOLS

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

PRODUCT

HCII 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 HCII shRNA Plasmid (m): sc-145906-SH and HCII shRNA (m) Lentiviral Particles: sc-145906-V as alternate gene silencing products.

For independent verification of HCII (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-145906A, sc-145906B and sc-145906C.

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

HCII siRNA (m) is recommended for the inhibition of HCII 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 HCII gene expression knockdown using RT-PCR Primer: HCII (m)-PR: sc-145906-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.