SANTA CRUZ BIOTECHNOLOGY, INC.

H-ficolin siRNA (h): sc-105432

BACKGROUND

H-ficolin (Ficolin-3, Collagen/fibrinogen domain-containing lectin 3 p35, Hakata antigen) is a 299 amino acid protein encoded by the human gene FCN3. H-ficolin belongs to the ficolin lectin family and contains one collagen-like domain and one fibrinogen C-terminal domain. Ficolins and mannose-binding lectin (MBL) are collagen-like defence proteins that serve as recognition molecules in lectin complement pathway. H-ficolin is a collagen-like defense molecule and is a known autoantigen in patients with systemic lupus erythematosus (SLE). Other collagen-like defense molecules, such as C1q, mannose-binding lectin (MBL) and L-ficolin, bind to apoptotic cells and mediate their clearance by phagocytic cells. Dysfunction in this mechanism is regarded as an important contributor to the pathophysiology of SLE. H-ficolin mediates the clearance of late apoptotic cells and is involved in the maintenance of tissue homeostasis and might play a protective role against the development of autoimmunity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FCN3 (human) mapping to 1p36.11.

PROTOCOLS

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

PRODUCT

H-ficolin siRNA (h) 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 H-ficolin shRNA Plasmid (h): sc-105432-SH and H-ficolin shRNA (h) Lentiviral Particles: sc-105432-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

H-ficolin siRNA (h) is recommended for the inhibition of H-ficolin 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 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 H-ficolin gene expression knockdown using RT-PCR Primer: H-ficolin (h)-PR: sc-105432-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.