SANTA CRUZ BIOTECHNOLOGY, INC.

M-ficolin siRNA (h): sc-92695

BACKGROUND

M-ficolin, also known as ficolin-A, ficolin-1, ficolin-α, FCN1, FCNM or collagen/fibrinogen domain containing protein 1, is a 326 amino acid member of the ficolin lectin family. Characteristic of ficolin family proteins, M-ficolin contains a short N-terminus, one collagen-like domain and one fibrinogen-like domain at its C-terminus. M-ficolin is a secreted innate immunity pattern recognition molecule predominantly expressed in peripheral blood leukocytes. It is believed to function as a plasma protein and is known to interact with elastin, carbohydrates and corticosteroids. M-ficolin exists as a homopolymer through intermolecular disulfide bonding and is involved in activating lectin activity via association with MASPs and specific carbohydrate ligands.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FCN1 (human) mapping to 9q34.3.

PROTOCOLS

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

PRODUCT

M-ficolin siRNA (h) 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 M-ficolin shRNA Plasmid (h): sc-92695-SH and M-ficolin shRNA (h) Lentiviral Particles: sc-92695-V as alternate gene silencing products.

For independent verification of M-ficolin (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-92695A, sc-92695B and sc-92695C.

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

M-ficolin siRNA (h) is recommended for the inhibition of M-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.

GENE EXPRESSION MONITORING

M-ficolin (036-05-1): sc-80486 is recommended as a control antibody for monitoring of M-ficolin gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor M-ficolin gene expression knockdown using RT-PCR Primer: M-ficolin (h)-PR: sc-92695-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.