SANTA CRUZ BIOTECHNOLOGY, INC.

LAD1 siRNA (m): sc-146635

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The Power to Question

BACKGROUND

LAD1 (linear IgA disease antigen), also known as Ladinin-1 or LADA, is a 517 amino acid secreted protein. Localized to the basement membrane zone of the extracellular space, LAD1 is an anchoring filament protein that is thought to contribute to the stability of the interaction of the epithelial layers with the mesenchyme. LAD1 is an autoantigen associated with linear IgA disease, in which circulating IgA autoantibodies recognize basement membrane zone proteins. LAD1 is expressed at highest levels in lung and kidney, with lower levels in spleen, liver and brain.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Lad1 (mouse) mapping to 1 E4.

PRODUCT

LAD1 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 LAD1 shRNA Plasmid (m): sc-146635-SH and LAD1 shRNA (m) Lentiviral Particles: sc-146635-V as alternate gene silencing products.

For independent verification of LAD1 (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-146635A, sc-146635B and sc-146635C.

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

LAD1 siRNA (m) is recommended for the inhibition of LAD1 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 LAD1 gene expression knockdown using RT-PCR Primer: LAD1 (m)-PR: sc-146635-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.