SANTA CRUZ BIOTECHNOLOGY, INC.

DEF8 siRNA (m): sc-142955

BACKGROUND

DEF8 (Differentially expressed in FDCP 8) is a 512 amino acid protein that is expressed at highest levels in peripheral leukocytes. It is expressed as five isoforms as a result of alternative splicing events. The gene encoding DEF8 maps to chromosome 16, which encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The rare disorder Rubinstein-Taybi syndrome is associated with chromosome 16, as is Crohn's disease, a gastrointestinal inflammatory condition that may involve the NOD2 gene. An association with systemic lupus erythematosis and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

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CHROMOSOMAL LOCATION

Genetic locus: Def8 (mouse) mapping to 8 E1.

PRODUCT

DEF8 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 DEF8 shRNA Plasmid (m): sc-142955-SH and DEF8 shRNA (m) Lentiviral Particles: sc-142955-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

DEF8 siRNA (m) is recommended for the inhibition of DEF8 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 DEF8 gene expression knockdown using RT-PCR Primer: DEF8 (m)-PR: sc-142955-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.

PROTOCOLS

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