SANTA CRUZ BIOTECHNOLOGY, INC.

CD300E siRNA (h): sc-94028

BACKGROUND

CD300E (CD300 antigen-like family member E), also known as CD300LE, CLM2 (CMRF35-like molecule 2), CMRF35A5 or IREM2 (immune receptor expressed on myeloid cells 2), is a 205 amino acid single-pass type I membrane protein that contains one Ig-like V-type (immunoglobulin-like) domain and belongs to the CD300 family. Interacting with DAP12, CD300E most likely functions as an activating receptor. CD300E is present on the surface of mature hematopoietic cells of the monocyte and myeloid lineages. The gene that encodes CD300E consists of approximately 13,872 bases and maps to human chromosome 17q25.1. Comprising over 2.5% of the human genome, chromosome 17 consists of about 81 million bases, encodes over 1,200 genes and has the highest gene density in the genome. Chromosome 17 is also enriched in segmental duplications, ranking third in density among the autosomes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CD300E (human) mapping to 17q25.1.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

CD300E 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 CD300E shRNA Plasmid (h): sc-94028-SH and CD300E shRNA (h) Lentiviral Particles: sc-94028-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

CD300E siRNA (h) is recommended for the inhibition of CD300E 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 CD300E gene expression knockdown using RT-PCR Primer: CD300E (h)-PR: sc-94028-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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