SANTA CRUZ BIOTECHNOLOGY, INC.

G6f siRNA (h): sc-95654

BACKGROUND

G6f, also known as lymphocyte antigen 6 complex locus protein G6f, is a single-pass type I membrane protein belonging to the immunoglobulin (Ig) superfamily. Located in the class III region of the major histocompatibility complex (MHC), the G6f gene lies in a cluster of genes encoding cell-surface proteins that play a role in the immune system and cellular recognition. G6f functions as a downstream effector of GRB2 and GRB7, and, in humans, it interacts with GRB2 and GRB7 through the phosphorylation of a tyrosine residue (Tyr 281) in the intracellular tail of G6f. This interaction is also mediated by the SH2 domain of GRB2 and possibly that of GRB7. G6f is a 297 amino acid protein, and it forms a disulfide-linked homodimer.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LY6G6F (human) mapping to 6p21.33.

PROTOCOLS

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

PRODUCT

G6f siRNA (h) is a pool of 2 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 G6f shRNA Plasmid (h): sc-95654-SH and G6f shRNA (h) Lentiviral Particles: sc-95654-V as alternate gene silencing products.

For independent verification of G6f (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-95654A and sc-95654B.

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

G6f siRNA (h) is recommended for the inhibition of G6f 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 G6f gene expression knockdown using RT-PCR Primer: G6f (h)-PR: sc-95654-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.