SANTA CRUZ BIOTECHNOLOGY, INC.

FAM50A siRNA (h): sc-90950

BACKGROUND

FAM50A (family with sequence similarity 50, member A), also known as DXS9928E, HXC26, XAP5 or 9F, is a 339 amino acid nuclear protein that belongs to the FAM50 family. Expressed ubiquitously with highest expression in fetal kidney, liver and brain, as well as adult heart, spleen, skeletal muscle, prostate and small intestine, FAM50A is thought to function as a transcription factor that may bind to DNA. FAM50A contains an SV40 large T antigen nuclear localization signal and a polymorphic CCG repeat region in its 5'-UTR. Defects in the gene encoding FAM50A may be associated with acute lymphoblastic leukemia, suggesting a possible role for FAM50A in carcinogenesis.

REFERENCES

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3. Sedlacek, Z., Münstermann, E., Dhorne-Pollet, S., Otto, C., Bock, D., Schütz, G. and Poustka, A. 1999. Human and mouse XAP-5 and XAP-5-like (X5L) genes: identification of an ancient functional retroposon differentially expressed in testis. Genomics 61: 125-132.
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CHROMOSOMAL LOCATION

Genetic locus: FAM50A (human) mapping to Xq28.

PRODUCT

FAM50A 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 FAM50A shRNA Plasmid (h): sc-90950-SH and FAM50A shRNA (h) Lentiviral Particles: sc-90950-V as alternate gene silencing products.

For independent verification of FAM50A (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-90950A, sc-90950B and sc-90950C.

RESEARCH USE

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

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

FAM50A siRNA (h) is recommended for the inhibition of FAM50A 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

FAM50A (D-5): sc-518197 is recommended as a control antibody for monitoring of FAM50A 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).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor FAM50A gene expression knockdown using RT-PCR Primer: FAM50A (h)-PR: sc-90950-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.