SANTA CRUZ BIOTECHNOLOGY, INC.

Fliz1 siRNA (h): sc-94586

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The Power to Question

BACKGROUND

Fliz1 (fetal liver zinc finger protein 1), also known as ZC3HDC8 or ZC3H8 (zinc finger CCCH-type containing 8), is a 291 amino acid novel zinc finger nuclear protein that contains three C3H1-type zinc fingers, which are necessary to induce transcriptional repression. Fliz1 is expressed in fetal liver hematopoietic progenitors and in several adult organs, including thymus. Fliz1 acts as a sequence-specific DNA-binding factor that binds within the negative *cis*-acting element intronic regulatory region (IRR) of the GATA-3 gene, thereby transcriptionally repressing the GATA-3 promoter. GATA-3 is a T cell-specific transcription factor and is essential for the development of the T cell lineage. When overexpressed, Fliz1 is suggested to induce thymocyte apoptosis, which may indicate a role in regulation of thymocyte homeostasis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZC3H8 (human) mapping to 2q13.

PRODUCT

Fliz1 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 Fliz1 shRNA Plasmid (h): sc-94586-SH and Fliz1 shRNA (h) Lentiviral Particles: sc-94586-V as alternate gene silencing products.

For independent verification of Fliz1 (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-94586A, sc-94586B and sc-94586C.

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

Fliz1 siRNA (h) is recommended for the inhibition of Fliz1 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 Fliz1 gene expression knockdown using RT-PCR Primer: Fliz1 (h)-PR: sc-94586-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.