SANTA CRUZ BIOTECHNOLOGY, INC.

IFI-205 siRNA (m): sc-146150

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The Power to Question

BACKGROUND

IFI-205 (interferon activated gene 205), also known as protein D3 or IFI-205A, is a 404 amino acid nuclear protein belonging to the HIN-200 family and containing one HIN-200 domain and one pyrin domain. IFI-205 is thought to be a transcriptional regulator and selectively expressed in monoculear phagocytes and mouse adipose-derived stem cells. IFI-205 is induced in adipose-derived stem cells under adipogenesis *in vitro* and localizes almost exclusively in the nucleus of undifferentiated cells, but translocates to the cytoplasm in intermediately and terminally differentiated cells. Supression of IFI-205 results in impaired differentiation. IFI-205 co-localizes and interacts directly with C/EBPβ and C/EBPα, and reducing the amount of this binding downregulates the transcription activities of C/EBPα and PPARγ. The IFI-205 gene is conserved in human, chimpanzee, Rhesus monkey, and rat.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ifi205 (mouse) mapping to 1 H3.

PROTOCOLS

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

PRODUCT

IFI-205 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 IFI-205 shRNA Plasmid (m): sc-146150-SH and IFI-205 shRNA (m) Lentiviral Particles: sc-146150-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

IFI-205 siRNA (m) is recommended for the inhibition of IFI-205 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 IFI-205 gene expression knockdown using RT-PCR Primer: IFI-205 (m)-PR: sc-146150-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.