SANTA CRUZ BIOTECHNOLOGY, INC.

Fe65L2 siRNA (h): sc-91884

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The Power to Question

BACKGROUND

Fe65L2 (FE65-like protein 2), also known as SRA or APBB3 (amyloid β (A4) precursor protein-binding, family B, member 3), is a 486 amino acid protein that contains one WW domain and two PID domains. Binding to the intracellular domain of the β-Amyloid precursor protein, Fe65L2 is thought to modulate the internalization and, therefore, the accessibility and function of β-Amyloid. Via its ability to control the intracellular accumulation of β-Amyloid, Fe65L2 is thought to play a role in the pathogenesis of Alzheimer's disease. Fe65L2 exists as four alternatively spliced isoforms designated isoform I, isoform II, isoform III and isoform IV. Fe65L2 interacts with Amyloid-like protein and is encoded by a gene located on human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: APBB3 (human) mapping to 5q31.3.

PRODUCT

Fe65L2 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 Fe65L2 shRNA Plasmid (h): sc-91884-SH and Fe65L2 shRNA (h) Lentiviral Particles: sc-91884-V as alternate gene silencing products.

For independent verification of Fe65L2 (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-91884A, sc-91884B and sc-91884C.

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

Fe65L2 siRNA (h) is recommended for the inhibition of Fe65L2 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 Fe65L2 gene expression knockdown using RT-PCR Primer: Fe65L2 (h)-PR: sc-91884-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.