

YJEFN3 siRNA (h): sc-97390

BACKGROUND

YJEFN3 (YjeF N-terminal domain containing 3), is a 299 amino acid protein that contains one YjeF N-terminal domain and may play a role in spermiogenesis and oogenesis. Expressed at the protein level in ovary and testis, YJEFN3 is also expressed in brain and mammary gland. Existing as two alternatively spliced isoforms, the YJEFN3 gene is conserved in canine, bovine, mouse, rat, chicken and zebrafish, and maps to human chromosome 19p13.11. Consisting of around 63 million bases with over 1,400 genes, chromosome 19 makes up over 2% of human genomic DNA. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fcα receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: YJEFN3 (human) mapping to 19p13.11.

PROTOCOLS

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

PRODUCT

YJEFN3 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see YJEFN3 shRNA Plasmid (h): sc-97390-SH and YJEFN3 shRNA (h) Lentiviral Particles: sc-97390-V as alternate gene silencing products.

For independent verification of YJEFN3 (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-97390A and sc-97390B.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

YJEFN3 siRNA (h) is recommended for the inhibition of YJEFN3 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 μ M in 66 μ l. 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 YJEFN3 gene expression knockdown using RT-PCR Primer: YJEFN3 (h)-PR: sc-97390-PR (20 μ l). 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.