SANTA CRUZ BIOTECHNOLOGY, INC.

NY-REN-34 siRNA (h): sc-75985

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

NY-REN-34, also known as PHF11 (PHD finger protein 11), APY, BCAP, IGEL or IGER, is a 292 amino acid protein that contains one PHD-type zinc finger and exists as multiple alternatively spliced isoforms. Expressed in all normal tissues, including testis, liver, lung, placenta and small intestine, NY-REN-34 interacts with BRCA1 and may play a role in the susceptibility to atopy and asthma. The gene encoding NY-REN-34 maps to human chromosome 13q14.2, which houses over 400 genes and comprises nearly 4% of the human genome. Chromosome 13 houses key tumor suppressor genes, including BRCA2 and RB1, which are associated with breast cancer susceptibility and retinoblastoma, respectively. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

REFERENCES

1. Scanlan, M.J., et al. 1999. Antigens recognized by autologous antibody in patients with renal-cell carcinoma. Int. J. Cancer 83: 456-464.
2. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607796. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Blumenthal, M.N. 2005. The role of genetics in the development of asthma and atopy. Curr. Opin. Allergy Clin. Immunol. 5: 141-145.
4. Jang, N., et al. 2005. Polymorphisms within the PHF11 gene at chromosome 13q14 are associated with childhood atopic dermatitis. Genes Immun. 6: 262-264.
5. Clarke, E., et al. 2008. Functional characterization of the atopy-associated gene PHF11. J. Allergy Clin. Immunol. 121: 1148-1154.

CHROMOSOMAL LOCATION

Genetic locus: PHF11 (human) mapping to 13q14.2.

PRODUCT

NY-REN-34 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 NY-REN-34 shRNA Plasmid (h): sc-75985-SH and NY-REN-34 shRNA (h) Lentiviral Particles: sc-75985-V as alternate gene silencing products.

For independent verification of NY-REN-34 (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-75985A, sc-75985B and sc-75985C.

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.

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

NY-REN-34 siRNA (h) is recommended for the inhibition of NY-REN-34 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 NY-REN-34 gene expression knockdown using RT-PCR Primer: NY-REN-34 (h)-PR: sc-75985-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.