SANTA CRUZ BIOTECHNOLOGY, INC.

STH siRNA (h): sc-106577

BACKGROUND

The intronless STH gene lies between exons 9 and 10 of the tau gene, which is implicated in a number of neurodegenerative disorders. It encodes a 128 residue protein with no clear homologs, and mimics the expresison patterns of tau. Though a polymorphism (Q7R) appears significant, data does not clearly show thus far whether or not this phenotype provides a useful marker for Alzheimer's or other forms of neurodegenerative disease.

REFERENCES

1. Conrad, C., et al. 2002. A polymorphic gene nested within an intron of the tau gene: implications for Alzheimer's disease. Proc. Natl. Acad. Sci. USA 99: 7751-7756.
2. Combarros, O., et al. 2003. Age-dependent association between the Q7R polymorphism in the Saitohin gene and sporadic Alzheimer's disease. Dement. Geriatr. Cogn. Disord. 16: 132-135.
3. Ezquerra, M., et al. 2004. Sequence analysis of tau 3'untranslated region and saitohin gene in sporadic progressive supranuclear palsy. J. Neurol. Neurosurg. Psychiatry 75: 155-157.

CHROMOSOMAL LOCATION

Genetic locus: STH (human) mapping to 17q21.31.

PRODUCT

STH siRNA (h) 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 STH shRNA Plasmid (h): sc-106577-SH and STH shRNA (h) Lentiviral Particles: sc-106577-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

STH siRNA (h) is recommended for the inhibition of STH expression in human cells.

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.

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.