



# HHAT siRNA (h): sc-88184

## BACKGROUND

HHAT (hedgehog acyltransferase), also known as MART-2, SKI-1, SIT or SKN, is a 493 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and belongs to the membrane-bound acyltransferase family. Expressed ubiquitously, HHAT functions to catalyze the N-terminal palmitoylation of SSH (slingshot homolog), an event that is required for SHH signaling pathways. HHAT is expressed in cancer cell lines, suggesting a role for HHAT in tumorigenesis. The gene encoding HHAT maps to human chromosome 1 and is expressed as four alternatively spliced isoforms. Chromosome 1 is the largest human chromosome, spanning about 260 million base pairs and making up 8% of the human genome. Several disorders, including Stickler syndrome, Parkinsons disease, Gaucher disease, malignant melanoma and Usher syndrome, are caused by defects in genes that localize to chromosome 1.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: HHAT (human) mapping to 1q32.2.

## PRODUCT

HHAT 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see HHAT shRNA Plasmid (h): sc-88184-SH and HHAT shRNA (h) Lentiviral Particles: sc-88184-V as alternate gene silencing products.

For independent verification of HHAT (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-88184A, sc-88184B and sc-88184C.

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

## APPLICATIONS

HHAT siRNA (h) is recommended for the inhibition of HHAT 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  $\mu$ M in 66  $\mu$ 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 HHAT gene expression knockdown using RT-PCR Primer: HHAT (h)-PR: sc-88184-PR (20  $\mu$ 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.