SANTA CRUZ BIOTECHNOLOGY, INC.

NAT-13 siRNA (h): sc-78481

BACKGROUND

Acetyltransferases and deacetylases are protein groups most often associated with oncogenesis and cell cycle regulation. NAT-13 (N-acetyltransferase 13), also known as NAA50 (N-α-acetyltransferase 50, NatE catalytic subunit), MAK3, NAT5 (N-acetyltransferase 5) or SAN, is a 169 amino acid cytoplasmic protein belonging to the acetyltransferase family and GNAT subfamily. Existing as two alternatively spliced isoforms, NAT-13 interacts with NARG1 and ARD1 as a possible catalytic component of the ARD1-NARG1 complex. NAT-13 is also known to interact with MAK10 and is encoded by a gene that maps to human chromosome 3q13.2.

REFERENCES

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3. Hou, F., Chu, C.W., Kong, X., Yokomori, K. and Zou, H. 2007. The acetyltransferase activity of San stabilizes the mitotic cohesin at the centromeres in a shugoshin-independent manner. J. Cell Biol. 177: 587-597.
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5. Polevoda, B., Arnesen, T. and Sherman, F. 2009. A synopsis of eukaryotic Nα-terminal acetyltransferases: nomenclature, subunits and substrates. BMC Proc. 3: S2.
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CHROMOSOMAL LOCATION

Genetic locus: NAA50 (human) mapping to 3q13.2.

PRODUCT

NAT-13 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 NAT-13 shRNA Plasmid (h): sc-78481-SH and NAT-13 shRNA (h) Lentiviral Particles: sc-78481-V as alternate gene silencing products.

For independent verification of NAT-13 (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-78481A, sc-78481B and sc-78481C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

NAT-13 siRNA (h) is recommended for the inhibition of NAT-13 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 NAT-13 gene expression knockdown using RT-PCR Primer: NAT-13 (h)-PR: sc-78481-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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