

N-twist siRNA (h): sc-89469

BACKGROUND

N-twist (neuronal twist), also known as Fer3-like protein or nephew of atonal 3, is a 166 amino acid member of the basic helix-loop-helix (bHLH) transcription factor family. N-twist functions as an inhibitor of transcription by binding DNA at the E box, a consensus bHLH-binding site. Primarily expressed in the developing central nervous system, N-twist interacts with the bHLH domain of E12 to form a heterodimer. By sequestering E proteins in a dominant-negative fashion, N-twist inhibits ASH1L-dependent transcriptional activation, which suggests the role N-twist may play in the negative regulation of neurogenesis. Methylation of the gene encoding N-twist has shown to be associated with a poor prognosis in CpG island (CGI) methylator phenotype (CIMP) positive neuroblastomas.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FERD3L (human) mapping to 7p21.1.

PROTOCOLS

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

PRODUCT

N-twist 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 N-twist shRNA Plasmid (h): sc-89469-SH and N-twist shRNA (h) Lentiviral Particles: sc-89469-V as alternate gene silencing products.

For independent verification of N-twist (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-89469A and sc-89469B.

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

N-twist siRNA (h) is recommended for the inhibition of N-twist 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 N-twist gene expression knockdown using RT-PCR Primer: N-twist (h)-PR: sc-89469-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.