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SANTA CRUZ BIOTECHNOLOGY, INC.

N-twist siRNA (m): sc-149775

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

1. Gradwohl, G., Fode, C. and Guillemot, F. 1996. Restricted expression of a novel murine atonal-related bHLH protein in undifferentiated neural precursors. Dev. Biol. 180: 227-241.
2. Spicer, D.B., Rhee, J., Cheung, W.L. and Lassar, A.B. 1996. Inhibition of myogenic bHLH and MEF2 transcription factors by the bHLH protein Twist. Science 272: 1476-1480.
3. Hamamori, Y., Wu, H.Y., Sartorelli, V. and Kedes, L. 1997. The basic domain of myogenic basic helix-loop-helix (bHLH) proteins is the novel target for direct inhibition by another bHLH protein, Twist. Mol. Cell. Biol. 17: 6563-6573.
4. Lee, M.S., Lowe, G.N., Strong, D.D., Wergedal, J.E. and Glackin, C.A. 1999. TWIST, a basic helix-loop-helix transcription factor, can regulate the human osteogenic lineage. J. Cell. Biochem. 75: 566-577.
5. Segev, E., Halachmi, N., Salzberg, A. and Ben-Arie, N. 2001. Nato3 is an evolutionarily conserved bHLH transcription factor expressed in the CNS of *Drosophila* and mouse. Mech. Dev. 106: 197-202.
6. Verzi, M.P., Anderson, J.P., Dodou, E., Kelly, K.K., Greene, S.B., North, B.J., Cripps, R.M. and Black, B.L. 2002. N-twist, an evolutionarily conserved bHLH protein expressed in the developing CNS, functions as a transcriptional inhibitor. Dev. Biol. 249: 174-190.
7. Elias, M.C., Tozer, K.R., Silber, J.R., Mikheeva, S., Deng, M., Morrison, R.S., Manning, T.C., Silbergeld, D.L., Glackin, C.A., Reh, T.A. and Rostomily, R.C. 2005. TWIST is expressed in human gliomas and promotes invasion. Neoplasia 7: 824-837.
8. Abe, M., Watanabe, N., McDonell, N., Takato, T., Ohira, M., Nakagawara, A. and Ushijima, T. 2008. Identification of genes targeted by CpG island methylator phenotype in neuroblastomas, and their possible integrative involvement in poor prognosis. Oncology 74: 50-60.

CHROMOSOMAL LOCATION

Genetic locus: Ferd3l (mouse) mapping to 12 A3.

PROTOCOLS

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

PRODUCT

N-twist siRNA (m) 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 N-twist shRNA Plasmid (m): sc-149775-SH and N-twist shRNA (m) Lentiviral Particles: sc-149775-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

N-twist siRNA (m) is recommended for the inhibition of N-twist expression in mouse 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 N-twist gene expression knockdown using RT-PCR Primer: N-twist (m)-PR: sc-149775-PR (20 µl). 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.