

LOC727947 siRNA (h): sc-92065

BACKGROUND

The gene encoding LOC727947 maps to chromosome 5 which contains 181 million base pairs and comprises nearly 6% of the human genome. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome. The LOC727947 gene product has been provisionally designated LOC727927 pending further characterization.

REFERENCES

1. Rauch, A., et al. 2007. Chromosome 5q subtelomeric deletion syndrome. *Am. J. Med. Genet. C Semin. Med. Genet.* 145C: 372-376.
2. Villa, N., et al. 2007. Fetal trisomy 5 mosaicism: case report and literature review. *Am. J. Med. Genet. A* 143A: 2343-2346.
3. Shadduck, R.K., et al. 2007. Recent advances in myelodysplastic syndromes. *Exp. Hematol.* 35: 137-143.
4. Falini, B., et al. 2007. Translocations and mutations involving the nucleophosmin (NPM1) gene in lymphomas and leukemias. *Haematologica* 92: 519-532.
5. Kristoffersen, K.E. 2008. Speech and language development in cri du chat syndrome: a critical review. *Clin. Linguist. Phon.* 22: 443-457.
6. Valent, P. 2008. Revealing the pathogenesis of the 5q- syndrome. *Eur. J. Clin. Invest.* 38: 539-540.
7. Buysse, K., et al. 2008. Mapping of 5q35 chromosomal rearrangements within a genomically unstable region. *J. Med. Genet.* 45: 672-678.
8. Azman, B.Z., et al. 2008. Two cases of deletion 5p syndrome: one with paternal involvement and another with atypical presentation. *Singapore Med. J.* 49: e98-e100.

CHROMOSOMAL LOCATION

Genetic locus: LOC727947 (human) mapping to 5q33.3.

PRODUCT

LOC727947 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see LOC727947 shRNA Plasmid (h): sc-92065-SH and LOC727947 shRNA (h) Lentiviral Particles: sc-92065-V as alternate gene silencing products.

PROTOCOLS

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

LOC727947 siRNA (h) is recommended for the inhibition of LOC727947 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.

RESEARCH USE

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