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SANTA CRUZ BIOTECHNOLOGY, INC.

LUZP2 siRNA (m): sc-149145

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

LUZP2 (leucine zipper protein 2) is a 346 amino acid secreted protein that exists as three alternatively spliced isoforms and is expressed only in brain and spinal cord. Expression of LUZP2 is significantly reduced in both Prader-Willi and Angelman syndromes, conditions which are associated with a 5 Mb deletion of human chromosome 15q11-q13. Prader-Willi is genetic disruption on the paternal chromosome, whereas Angelman syndrome is genetic disruption on the maternal chromosome. Also, the gene encoding LUZP2 is one of several genes that are deleted in patients with Wilms tumor-Aniridia-Genitourinary anomalies-mental retardation (WAGR) syndrome, a condition in which patients are predisposed to develop a tumor of the kidneys, absence of the iris, anomalies of the genitourinary system and mental retardation.

REFERENCES

1. Park, S., Tomlinson, G., Nisen, P. and Haber, D.A. 1993. Altered *trans*-activational properties of a mutated WT1 gene product in a WAGR-associated Wilms' tumor. Cancer Res. 53: 4757-4760.
2. Glenn, C.C., Driscoll, D.J., Yang, T.P. and Nicholls, R.D. 1997. Genomic imprinting: potential function and mechanisms revealed by the Prader-Willi and Angelman syndromes. Mol. Hum. Reprod. 3: 321-332.
3. Clark, H.F., Gurney, A.L., Abaya, E., Baker, K., Baldwin, D., Brush, J., Chen, J., Chow, B., Chui, C., Crowley, C., Currell, B., Deuel, B., Dowd, P., Eaton, D., Foster, J., Grimaldi, C., Gu, Q., Hass, P.E., Heldens, S., Huang, A., et al. 2003. The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. Genome Res. 13: 2265-2270.
4. Wu, M., Michaud, E.J. and Johnson, D.K. 2003. Cloning, functional study and comparative mapping of Luzp2 to mouse chromosome 7 and human chromosome 11p13-11p14. Mamm. Genome 14: 323-334.
5. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 608178. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Stefan, M., Claiborn, K.C., Stasiek, E., Chai, J.H., Ohta, T., Longnecker, R., Greally, J.M. and Nicholls, R.D. 2005. Genetic mapping of putative Chrna7 and Luzp2 neuronal transcriptional enhancers due to impact of a transgene-insertion and 6.8 Mb deletion in a mouse model of Prader-Willi and Angelman syndromes. BMC Genomics 6: 157.
7. Lennon, P.A., Scott, D.A., Lonsdorf, D., Wargowski, D.S., Kirkpatrick, S., Patel, A. and Cheung, S.W. 2006. WAGR(O?) syndrome and congenital ptosis caused by an unbalanced t(11;15)(p13;p11.2)dn demonstrating a 7 megabase deletion by FISH. Am. J. Med. Genet. A 140: 1214-1218.
8. Xu, S., Han, J.C., Morales, A., Menzie, C.M., Williams, K. and Fan, Y.S. 2008. Characterization of 11p14-p12 deletion in WAGR syndrome by array CGH for identifying genes contributing to mental retardation and autism. Cytogenet. Genome Res. 122: 181-187.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Luzp2 (mouse) mapping to 7 B5.

PRODUCT

LUZP2 siRNA (m) 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 LUZP2 shRNA Plasmid (m): sc-149145-SH and LUZP2 shRNA (m) Lentiviral Particles: sc-149145-V as alternate gene silencing products.

For independent verification of LUZP2 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-149145A, sc-149145B and sc-149145C.

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

LUZP2 siRNA (m) is recommended for the inhibition of LUZP2 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 LUZP2 gene expression knockdown using RT-PCR Primer: LUZP2 (m)-PR: sc-149145-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.