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SANTA CRUZ BIOTECHNOLOGY, INC.

OBSL1 siRNA (m): sc-150167

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

OBSL1 (Obscurin-like 1) is a novel 1,401 amino acid cytoskeletal adaptor protein that is closely related to Obscurin and links internal cytoskeletons to the cell membrane. Existing as two alternatively spliced isoforms, OBSL1 belongs to the Unc-89/Obscurin family and is widely expressed, with highest levels found in heart and ovary, followed by testis, brain and skeletal muscle. OBSL1 contains one fibronectin type-III domain, eleven Ig-like (immunoglobulin-like) domains, and is encoded by a gene that maps to human chromosome 2q35. Defects in the OBSL1 gene are the cause of an autosomal recessive disorder known as 3M syndrome type 2 (3M2), in which patients exhibit short stature, a short upturned nose with anteverted nares, full lips, triangular shaped face, frontal bossing and distinguished heels.

REFERENCES

1. Ishikawa, K., Nagase, T., Suyama, M., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N. and Ohara, O. 1998. Prediction of the coding sequences of unidentified human genes. X. The complete sequences of 100 new cDNA clones from brain which can code for large proteins *in vitro*. DNA Res. 5: 169-176.
2. Kontrogianni-Konstantopoulos, A. and Bloch, R.J. 2005. Obscurin: a multitasking muscle giant. J. Muscle Res. Cell Motil. 26: 419-426.
3. Geisler, S.B., Robinson, D., Hauringa, M., Raeker, M.O., Borisov, A.B., Westfall, M.V. and Russell, M.W. 2007. Obscurin-like 1, OBSL1, is a novel cytoskeletal protein related to obscurin. Genomics 89: 521-531.
4. Fukuzawa, A., Lange, S., Holt, M., Vihola, A., Carmignac, V., Ferreiro, A., Udd, B. and Gautel, M. 2008. Interactions with titin and myomesin target obscurin and Obscurin-like 1 to the M-band: implications for hereditary myopathies. J. Cell Sci. 121: 1841-1851.
5. Hanson, D., Murray, P.G., Sud, A., Temtamy, S.A., Aglan, M., Superti-Furga, A., Holder, S.E., Urquhart, J., Hilton, E., Manson, F.D., Scambler, P., Black, G.C. and Clayton, P.E. 2009. The primordial growth disorder 3M syndrome connects ubiquitination to the cytoskeletal adaptor OBSL1. Am. J. Hum. Genet. 84: 801-806.
6. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 610991. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. Huber, C., Fradin, M., Edouard, T., Le Merrer, M., Alanay, Y., Da Silva, D.B., David, A., Hamamy, H., van Hest, L., Lund, A.M., Michaud, J., Oley, C., Patel, C., Rajab, A., Skidmore, D.L., Stewart, H., Tauber, M., et al. 2010. OBSL1 mutations in 3M syndrome are associated with a modulation of IGFBP2 and IGFBP5 expression levels. Hum. Mutat. 31: 20-26.

CHROMOSOMAL LOCATION

Genetic locus: Obsl1 (mouse) mapping to 1 C4.

PROTOCOLS

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

PRODUCT

OBSL1 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 OBSL1 shRNA Plasmid (m): sc-150167-SH and OBSL1 shRNA (m) Lentiviral Particles: sc-150167-V as alternate gene silencing products.

For independent verification of OBSL1 (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-150167A, sc-150167B and sc-150167C.

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

OBSL1 siRNA (m) is recommended for the inhibition of OBSL1 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 OBSL1 gene expression knockdown using RT-PCR Primer: OBSL1 (m)-PR: sc-150167-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.