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### SZABO-SCANDIC Handels GmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic)



# LUC7L2 siRNA (m): sc-149140

## BACKGROUND

LUC7L2 (LUC7-like 2), also known as CGI-59, CGI-74, LUC7B2 or hLuc7B2, is a 392 amino acid protein and member of the Luc7 family. A homolog of the yeast protein, mammalian LUC7L2 may bind to RNA via its arginine/serine-rich domain and may be involved in recognition of non-consensus splice donor sites. Containing a single highly conserved C<sub>2</sub>H<sub>2</sub>-type zinc finger, LUC7L2 is widely expressed and undergoes alternative splicing and polyadenylation. LUC7L2 is encoded by a gene located on human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

## REFERENCES

1. Liang, H., Fairman, J., Claxton, D.F., Nowell, P.C., Green, E.D. Nagarajan, L. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. *Proc. Natl. Acad. Sci. USA* 95: 3781-3785.
2. Tufarelli, C., Frischauf, A.M., Hardison, R., Flint, J. and Higgs, D.R. 2001. Characterization of a widely expressed gene (LUC7-LIKE; LUC7L) defining the centromeric boundary of the human  $\alpha$ -globin domain. *Genomics* 71: 307-314.
3. Tufarelli, C., Stanley, J.A., Garrick, D., Sharpe, J.A., Ayyub, H., Wood, W.G. and Higgs, D.R. 2003. Transcription of antisense RNA leading to gene silencing and methylation as a novel cause of human genetic disease. *Nat. Genet.* 34: 157-165.
4. Kimura, E., Hidaka, K., Kida, Y., Morisaki, H., Shirai, M., Araki, K., Suzuki, M., Yamamura, K.I. and Morisaki, T. 2004. Serine-arginine-rich nuclear protein Luc7l regulates myogenesis in mice. *Gene* 341: 41-47.
5. Howell, V.M., Jones, J.M., Bergren, S.K., Li, L., Billi, A.C., Avenarius, M.R. and Meisler, M.H. 2007. Evidence for a direct role of the disease modifier SCN1M1 in splicing. *Hum. Mol. Genet.* 16: 2506-2516.
6. Brezinová, J., Zemanová, Z., Ransdorfová, S., Pavlistová, L., Babická, L., Housková, L., Melichercíková, J., Sisková, M., Cermák, J. and Michalová, K. 2007. Structural aberrations of chromosome 7 revealed by a combination of molecular cytogenetic techniques in myeloid malignancies. *Cancer Genet. Cytogenet.* 173: 10-16.
7. Kwon, M.J., Oh, E., Lee, S., Roh, M.R., Kim, S.E., Lee, Y., Choi, Y.L., In, Y.H., Park, T., Koh, S.S. and Shin, Y.K. 2009. Identification of novel reference genes using multiplatform expression data and their validation for quantitative gene expression analysis. *PLoS ONE* 4: e6162.

## CHROMOSOMAL LOCATION

Genetic locus: Luc7l2 (mouse) mapping to 6 B1.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## PRODUCT

LUC7L2 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see LUC7L2 shRNA Plasmid (m): sc-149140-SH and LUC7L2 shRNA (m) Lentiviral Particles: sc-149140-V as alternate gene silencing products.

For independent verification of LUC7L2 (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-149140A, sc-149140B and sc-149140C.

## 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

LUC7L2 siRNA (m) is recommended for the inhibition of LUC7L2 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  $\mu$ M in 66  $\mu$ 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 LUC7L2 gene expression knockdown using RT-PCR Primer: LUC7L2 (m)-PR: sc-149140-PR (20  $\mu$ 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.