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SANTA CRUZ BIOTECHNOLOGY, INC.

PHF19 siRNA (m): sc-152211

BACKGROUND

PHF19 (PHD finger protein 19), also known as PCL3 (polycomb-like 3), is a 580 amino acid protein that contains two PHD-type zinc fingers. PHF19 exists as three alternatively spliced isoforms and functions as a transcriptional repressor. Localizing to nucleus, PHF19 is ubiquitously expressed, with highest expression in placenta, skeletal muscle, kidney, liver and peripheral blood leukocytes. PHF19 is over-expressed in many types of cancers, including colon, skin, lung, rectal, cervical, uterus and liver cancers, as well as in cell lines derived from different stages of melanoma and in glioma cell lines. Increased PHF19 expression also correlates with advanced cancers, suggesting that PHF19 activation is not restricted to a single step during tumor progression. Encoded by a gene that maps to human chromosome 9q33.2, PHF19 is a candidate gene in a region associated with rheumatoid arthritis.

REFERENCES

1. Wang, S., Robertson, G.P. and Zhu, J. 2004. A novel human homologue of *Drosophila* polycomblike gene is up-regulated in multiple cancers. Gene 343: 69-78.
2. Kurreeman, F.A., Padyukov, L., Marques, R.B., Schrodi, S.J., Seddighzadeh, M., Stoeken-Rijsbergen, G., van der Helm-van Mil, A.H., Allaart, C.F., Verduyn, W., Houwing-Duistermaat, J., Alfredsson, L., Begovich, A.B., et al. 2007. A candidate gene approach identifies the TRAF1/C5 region as a risk factor for rheumatoid arthritis. PLoS Med. 4: e278.
3. Sarma, K., Margueron, R., Ivanov, A., Pirrotta, V. and Reinberg, D. 2008. Ezh2 requires PHF1 to efficiently catalyze H3 lysine 27 trimethylation *in vivo*. Mol. Cell. Biol. 28: 2718-2731.
4. Coenen, M.J. and Gregersen, P.K. 2009. Rheumatoid arthritis: a view of the current genetic landscape. Genes Immun. 10: 101-111.
5. Dagle, J.M., Lepp, N.T., Cooper, M.E., Schaa, K.L., Kelsey, K.J., Orr, K.L., Caprau, D., Zimmerman, C.R., Steffen, K.M., Johnson, K.J., Marazita, M.L. and Murray, J.C. 2009. Determination of genetic predisposition to patent ductus arteriosus in preterm infants. Pediatrics 123: 1116-1123.
6. Adams-Cioaba, M.A., Guo, Y., Bian, C., Amaya, M.F., Lam, R., Wasney, G.A., Vedadi, M., Xu, C. and Min, J. 2010. Structural studies of the tandem Tudor domains of fragile X mental retardation related proteins FXR1 and FXR2. PLoS ONE 5: e13559.
7. Friberg, A., Oddone, A., Klymenko, T., Müller, J. and Sattler, M. 2010. Structure of an atypical Tudor domain in the *Drosophila* polycomblike protein. Protein Sci. 19: 1906-1916.
8. Li, X., Isono, K.I., Yamada, D., Endo, T.A., Endoh, M., Shinga, J., Mizutani-Koseki, Y., Otte, A.P., Casanova, M., Kitamura, H., Kamijo, T., Sharif, J., Ohara, O., Toyada, T., Bernstein, B.E., Brockdorff, N., et al. 2011. Mammalian polycomb-like Pcl2/Mtf2 is a novel regulatory component of PRC2 that can differentially modulate polycomb activity both at the Hox gene cluster and at Cdkn2a genes. Mol. Cell. Biol. 31: 351-364.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Phf19 (mouse) mapping to 2 B.

PRODUCT

PHF19 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 PHF19 shRNA Plasmid (m): sc-152211-SH and PHF19 shRNA (m) Lentiviral Particles: sc-152211-V as alternate gene silencing products.

For independent verification of PHF19 (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-152211A, sc-152211B and sc-152211C.

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

PHF19 siRNA (m) is recommended for the inhibition of PHF19 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 PHF19 gene expression knockdown using RT-PCR Primer: PHF19 (m)-PR: sc-152211-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.