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PC-LKC siRNA (m): sc-152045

BACKGROUND

PC-LKC (protocadherin LKC), also known as CDHR2 (cadherin-related family member 2) or PCDH24 (protocadherin-24), is a 1,310 amino acid single-pass type I membrane protein that contains nine cadherin domains. Interacting with MAST205, PC-LKC plays a role in contact inhibition at the lateral surface of epithelial cells. While highly expressed in liver, kidney and colon, PC-LKC is moderately expressed in small intestine. In addition, PC-LKC is down-regulated in a number of liver and colon cancers. The gene that encodes PC-LKC consists of approximately 53,464 bases and maps to human chromosome 5q35.2. With 181 million base pairs encoding around 1,000 genes, chromosome 5 makes up about 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome and deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

1. Edwards, S.J., et al. 1997. The mutational spectrum in Treacher Collins syndrome reveals a predominance of mutations that create a premature-termination codon. *Am. J. Hum. Genet.* 60: 515-524.
2. McDaniel, L.D., et al. 1997. Confirmation of homozygosity for a single nucleotide substitution mutation in a Cockayne syndrome patient using monoallelic mutation analysis in somatic cell hybrids. *Hum. Mutat.* 10: 317-321.
3. Suzuki, S.T. 2000. Recent progress in protocadherin research. *Exp. Cell Res.* 261: 13-18.
4. Okazaki, N., et al. 2002. Protocadherin LKC, a new candidate for a tumor suppressor of colon and liver cancers, its association with contact inhibition of cell proliferation. *Carcinogenesis* 23: 1139-1148.
5. Yang, L.Y., et al. 2004. Differentially expressed genes between solitary large hepatocellular carcinoma and nodular hepatocellular carcinoma. *World J. Gastroenterol.* 10: 3569-3573.
6. Finch, R., et al. 2005. Familial adenomatous polyposis and mental retardation caused by a *de novo* chromosomal deletion at 5q15-q22: report of a case. *Dis. Colon Rectum* 48: 2148-2152.
7. Vera-Carbonell, A., et al. 2009. Characterization of a *de novo* complex chromosomal rearrangement in a patient with Cri-du-chat and trisomy 5p syndromes. *Am. J. Med. Genet. A* 149A: 2513-2521.
8. Ravandi, F., et al. 2009. Superior outcome with hypomethylating therapy in patients with acute myeloid leukemia and high-risk myelodysplastic syndrome and chromosome 5 and 7 abnormalities. *Cancer* 115: 5746-5751.
9. Ose, R., et al. 2009. PCDH24-induced contact inhibition involves downregulation of β -catenin signaling. *Mol. Oncol.* 3: 54-66.

CHROMOSOMAL LOCATION

Genetic locus: Cdh2 (mouse) mapping to 13 B1.

PROTOCOLS

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

PRODUCT

PC-LKC 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PC-LKC shRNA Plasmid (m): sc-152045-SH and PC-LKC shRNA (m) Lentiviral Particles: sc-152045-V as alternate gene silencing products.

For independent verification of PC-LKC (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-152045A, sc-152045B and sc-152045C.

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

PC-LKC siRNA (m) is recommended for the inhibition of PC-LKC 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 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor PC-LKC gene expression knockdown using RT-PCR Primer: PC-LKC (m)-PR: sc-152045-PR (20 μ 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.