SANTA CRUZ BIOTECHNOLOGY, INC.

PLAC8L1 siRNA (h): sc-91788

BACKGROUND

PLAC8L1 (PLAC8-like 1) is a 177 amino acid protein belonging to the cornifelin family. Conserved in chimpanzee, bovine, mouse and zebrafish, PLAC8L1 is encoded by a gene that maps to human chromosome 5q32. With 181 million base pairs encoding approximately 1,000 genes, chromosome 5 makes up 6% of human genomic DNA. Chromosome 5 is associated with Cockayne syndrome through CSA, and with familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome, caused by insertions or deletions within Treacle, is also associated with chromosome 5. Deletion of 5q, or chromosome 5 altogether, is common in acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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3. Kadmon, M., et al. 2001. Duodenal adenomatosis in familial adenomatous polyposis coli. A review of the literature and results from the Heidelberg Polyposis Register. Int. J. Colorectal Dis. 16: 63-75.
4. Kawasaki, K., et al. 2007. Gene duplication and the evolution of vertebrate skeletal mineralization. Cells Tissues Organs 186: 7-24.
5. Aretz, S., et al. 2007. Somatic APC mosaicism: a frequent cause of familial adenomatous polyposis (FAP). Hum. Mutat. 28: 985-992.
6. Cleaver, J.E., et al. 2007. Cockayne syndrome exhibits dysregulation of p21 and other gene products that may be independent of transcription-coupled repair. Neuroscience 145: 1300-1308.
7. Govani, F.S., et al. 2010. Fine mapping of the hereditary haemorrhagic telangiectasia (HHT)3 locus on chromosome 5 excludes VE-Cadherin-2, Sprouty4 and other interval genes. J. Angiogenes Res. 2: 15.

CHROMOSOMAL LOCATION

Genetic locus: PLAC8L1 (human) mapping to 5q32.

PRODUCT

PLAC8L1 siRNA (h) 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 PLAC8L1 shRNA Plasmid (h): sc-91788-SH and PLAC8L1 shRNA (h) Lentiviral Particles: sc-91788-V as alternate gene silencing products.

For independent verification of PLAC8L1 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-91788A, sc-91788B and sc-91788C.

PROTOCOLS

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

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

PLAC8L1 siRNA (h) is recommended for the inhibition of PLAC8L1 expression in human 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 PLAC8L1 gene expression knockdown using RT-PCR Primer: PLAC8L1 (h)-PR: sc-91788-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.