SANTA CRUZ BIOTECHNOLOGY, INC.

POM121L2 siRNA (h): sc-95589

BACKGROUND

POM121L2 (POM121 membrane glycoprotein-like 2), also known as POM121-like protein 2 or POM121L, is a 971 amino acid phosphoprotein that belongs to the POM121 family. POM121L2 is encoded by a gene that maps to human chromosome 6p22.1, a region significantly associated with schizophrenia. Chromosome 6 makes up nearly 6% of the human genome and contains 170 million base pairs, which encode 1,200 genes. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. A bipolar disorder susceptibility locus is also linked to the q arm of chromosome 6. The PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatiblity complex proteins are located on chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6.

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CHROMOSOMAL LOCATION

Genetic locus: POM121L2 (human) mapping to 6p25.3.

PRODUCT

POM121L2 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 POM121L2 shRNA Plasmid (h): sc-95589-SH and POM121L2 shRNA (h) Lentiviral Particles: sc-95589-V as alternate gene silencing products.

For independent verification of POM121L2 (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-95589A, sc-95589B and sc-95589C.

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

POM121L2 siRNA (h) is recommended for the inhibition of POM121L2 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 POM121L2 gene expression knockdown using RT-PCR Primer: POM121L2 (h)-PR: sc-95589-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.