SANTA CRUZ BIOTECHNOLOGY, INC.

PLET1 siRNA (h): sc-96709

BACKGROUND

PLET1 (placenta-expressed transcript 1 protein) is a 207 amino acid single-pass type I membrane protein that contains four exons. Linked to wound response functions during healing, PLET1 may promote wound repair and is a potential tool for genetic analysis of development, homeostasis and injury in organ/tissue systems. PLET1 is poorly conserved between species, with only 34% identity existing between mouse PLET1 and the human orthologue. Although highly expressed in pig and mouse placenta and mouse thymic epithelial progenitor cells, PLET1 is weakly expressed in human. Up-regulated in intercaruncular areas of somatic cell nuclear transfer (SCNT) pregnancies, PLET1 is expressed in endometrium at implantation and in luminal epithelium and likely plays a role in endometrium-trophoblast interactions.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLET1 (human) mapping to 11q23.1.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

PLET1 siRNA (h) is a pool of 2 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 PLET1 shRNA Plasmid (h): sc-96709-SH and PLET1 shRNA (h) Lentiviral Particles: sc-96709-V as alternate gene silencing products.

For independent verification of PLET1 (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-96709A and sc-96709B.

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

PLET1 siRNA (h) is recommended for the inhibition of PLET1 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 PLET1 gene expression knockdown using RT-PCR Primer: PLET1 (h)-PR: sc-96709-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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