

PLG-RKT siRNA (h): sc-92576

BACKGROUND

Cleavage of the serine proteinase plasminogen to form plasmin is the central event in the dissolution of blood clots by the fibrinolytic system. Within the fibrinolytic cascade, the serine proteinases urokinase-type plasminogen activator (uPA) and tissue-type plasminogen activator (tPA) activate the proenzyme plasminogen by cleaving plasminogen to form the fibrinolytically active enzyme plasmin. PLG-RKT (plasminogen receptor (KT)), also known as AD025, MDS030, C9orf46, PLGRKT or Plg-R(KT), is a 147 amino acid multi-pass membrane plasminogen receptor that colocalizes with uPAR to the cell surface. Expressed in peripheral blood cells, monocytes and in adrenal medulla, PLG-RKT may be involved in plasminogen-dependent regulation of macrophage invasion, chemotactic migration, and recruitment in the inflammatory response.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLGRKT (human) mapping to 9p24.1.

PRODUCT

PLG-RKT 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PLG-RKT shRNA Plasmid (h): sc-92576-SH and PLG-RKT shRNA (h) Lentiviral Particles: sc-92576-V as alternate gene silencing products.

For independent verification of PLG-RKT (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-92576A and sc-92576B.

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

PLG-RKT siRNA (h) is recommended for the inhibition of PLG-RKT 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 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 PLG-RKT gene expression knockdown using RT-PCR Primer: PLG-RKT (h)-PR: sc-92576-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.

PROTOCOLS

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