

PSG5 siRNA (h): sc-97505

BACKGROUND

Pregnancy specific β -1-glycoprotein 5 (PSG5), also designated fetal liver non-specific cross-reactive antigen 3, is a member of the PSG family, a group of closely related secreted glycoproteins that are highly expressed in fetal placental syncytiotrophoblast cells. The members of the PSG protein family all have a characteristic N-terminal domain that is homologous to the immunoglobulin variable region. PSGs become detectable in serum during the first two to three weeks of pregnancy and increase as the pregnancy progresses, eventually representing the most abundant fetal protein in the maternal blood at term. PSGs function to stimulate secretion of TH2-type cytokines from monocytes, and they may also modulate the maternal immune system during pregnancy, thereby protecting the semi-allopathic fetus from rejection. PSGs are commonly expressed in trophoblast tumors. Eleven human PSG proteins (PSG1-PSG11) have been described.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: PSG5 (human) mapping to 19q13.31.

PRODUCT

PSG5 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PSG5 shRNA Plasmid (h): sc-97505-SH and PSG5 shRNA (h) Lentiviral Particles: sc-97505-V as alternate gene silencing products.

For independent verification of PSG5 (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-97505A, sc-97505B and sc-97505C.

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

PSG5 siRNA (h) is recommended for the inhibition of PSG5 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 PSG5 gene expression knockdown using RT-PCR Primer: PSG5 (h)-PR: sc-97505-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.