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syncytin-A siRNA (m): sc-153986

BACKGROUND

Syncytin, also known as ERVWE1 (endogenous retroviral family W, env(C7), member 1), is a human endogenous retrovirus family W (HERV-W) envelope protein that is expressed in placental tissue and is involved in the fusion of cytotrophoblast cells to form the multi-nucleated syncytial layer of the placenta. In mice, as in humans, placental cytotrophoblast morphogenesis, more commonly known as trophoblast maturation, is crucial for proper embryonic and placental development. Syncytin-A, also known as Gm52 or Syna, is a murine protein that is highly expressed in placental tissue and functions in a similar manner to human syncytin, specifically exhibiting cell-cell fusogenic activity that is important for embryogenesis and trophoblast development.

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CHROMOSOMAL LOCATION

Genetic locus: Syna (mouse) mapping to 5 G2.

RESEARCH USE

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

PRODUCT

syncytin-A siRNA (m) 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 syncytin-A shRNA Plasmid (m): sc-153986-SH and syncytin-A shRNA (m) Lentiviral Particles: sc-153986-V as alternate gene silencing products.

For independent verification of syncytin-A (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-153986A, sc-153986B and sc-153986C.

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

syncytin-A siRNA (m) is recommended for the inhibition of syncytin-A expression in mouse 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 syncytin-A gene expression knockdown using RT-PCR Primer: syncytin-A (m)-PR: sc-153986-PR (20 μ l). 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.