SANTA CRUZ BIOTECHNOLOGY, INC.

# FLRT1 siRNA (h): sc-75034

## BACKGROUND

The leucine-rich repeat (LRR) is a 20-30 amino acid motif that forms a hydrophobic $\alpha/\beta$ horseshoe fold, allowing it to accommodate several leucine residues within a tightly packed core. All LRRs contain a variable segment and a highly conserved segment, the latter of which accounts for 11 or 12 residues of the entire LRR motif. FLRT1 (Fibronectin leucine rich transmembrane protein 1) is a 646 amino acid single-pass type I membrane protein that contains one Fibronectin type-III domain and ten LRRs. Expressed in kidney and brain, FLRT1 is thought to play a role in cell adhesion and receptor signaling. FLRT1 shares similarity with FLRT2 and FLRT3 and is subject to post-translational N-glycosylation. The gene encoding FLRT1 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome.

## REFERENCES


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4. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 604806. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
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## CHROMOSOMAL LOCATION

Genetic locus: FLRT1 (human) mapping to 11q13.1.

## PROTOCOLS

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

## PRODUCT

FLRT1 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 FLRT1 shRNA Plasmid (h): sc-75034-SH and FLRT1 shRNA (h) Lentiviral Particles: sc-75034-V as alternate gene silencing products.

For independent verification of FLRT1 (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-75034A, sc-75034B and sc-75034C.

## 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

FLRT1 siRNA (h) is recommended for the inhibition of FLRT1 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 FLRT1 gene expression knockdown using RT-PCR Primer: FLRT1 (h)-PR: sc-75034-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.