



# FGF-11 siRNA (h): sc-39464

## BACKGROUND

Fibroblast growth factor-1 (FGF-1), also designated acidic FGF, and fibroblast growth factor-2 (FGF-2), also designated basic FGF, are members of a family of growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuroectodermal origin. Additional members of the FGF family include the oncogenes FGF-3 (Int2) and FGF-4 (hst/Kaposi), FGF-5, FGF-6, FGF-7 (KGF), FGF-8 (AIGF), FGF-9 (GAF) and FGF-10–FGF-23. Members of the FGF family share 30–55% amino acid sequence identity and similar gene structure, and are capable of transforming cultured cells when overexpressed in transfected cells. Cellular receptors for FGFs are members of a second multigene family including four tyrosine kinases, designated Flg (FGFR-1), Bek (FGFR-L), TKF and FGFR-3.

## REFERENCES

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- Rifkin, D.B. and Moscatelli, D. 1989. Recent developments in the cell biology of fibroblast growth factor. *J. Cell Biol.* 109: 1–6.
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- Dionne, C.A., et al. 1990. Cloning and expression of two distinct high-affinity receptors cross-reacting with acidic and basic fibroblast growth factors. *EMBO J.* 9: 2685–2692.
- Tanaka, A., et al. 1992. Cloning and characterization of an androgen-induced growth factor essential for the androgen-dependent growth of mouse mammary carcinoma cells. *Proc. Natl. Acad. Sci. USA* 89: 8928–8932.

## CHROMOSOMAL LOCATION

Genetic locus: FGF11 (human) mapping to 17p13.1.

## PRODUCT

FGF-11 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50–100 transfections. Also see FGF-11 shRNA Plasmid (h): sc-39464-SH and FGF-11 shRNA (h) Lentiviral Particles: sc-39464-V as alternate gene silencing products.

For independent verification of FGF-11 (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-39464A, sc-39464B and sc-39464C.

## STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at  $-20^{\circ}$  C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at  $-20^{\circ}$  C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

FGF-11 siRNA (h) is recommended for the inhibition of FGF-11 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  $\mu$ M in 66  $\mu$ 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 FGF-11 gene expression knockdown using RT-PCR Primer: FGF-11 (h)-PR: sc-39464-PR (20  $\mu$ l). Annealing temperature for the primers should be 55–60 $^{\circ}$  C and the extension temperature should be 68–72 $^{\circ}$  C.

## SELECT PRODUCT CITATIONS

- Wu, X., et al. 2021. Fibroblast growth factor 11 (FGF11) promotes non-small cell lung cancer (NSCLC) progression by regulating hypoxia signaling pathway. *J. Transl. Med.* 19: 353.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.