

## IFT43 siRNA (m): sc-108354

### BACKGROUND

1700019E19Rik, also known as IFT43 (intraflagellar transport protein 43 homolog) or R75064, is a 206 amino acid protein that belongs to the IFT43 family. Localizing to the cytoplasm, 1700019E19Rik is a component of the IFT complex A (IFT-A), which is involved in ciliary transportation along axonemal microtubules. 1700019E19Rik exists as three alternatively spliced isoforms, and is encoding by a gene mapping to mouse chromosome 12 D2. Mutations to the human homolog of 1700019E19Rik, known as IFT43 or C14orf179, may be associated with sensenbrenner syndrome, a heterogeneous ciliopathy characterized by heart defects, liver fibrosis, and skeletal and ectodermal anomalies.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: Ift43 (mouse) mapping to 12 D2.

### PRODUCT

IFT43 siRNA (m) 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see IFT43 shRNA Plasmid (m): sc-108354-SH and IFT43 shRNA (m) Lentiviral Particles: sc-108354-V as alternate gene silencing products.

For independent verification of IFT43 (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-108354A and sc-108354B.

### 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  $\mu$ 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

IFT43 siRNA (m) is recommended for the inhibition of IFT43 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  $\mu$ 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 IFT43 gene expression knockdown using RT-PCR Primer: IFT43 (m)-PR: sc-108354-PR (20  $\mu$ 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](http://www.scbt.com) for detailed protocols and support products.