# ZFR2 siRNA (h): sc-97930



The Power to Question

#### **BACKGROUND**

ZFR2 (zinc finger RNA-binding protein 2) is a 939 amino acid protein that has one DZF domain. ZFR2 is encoded by a gene located on human chromosome 19p13.3 and exists as two alternatively spliced isoforms. Consisting of around 63 million bases with over 1,400 genes, chromosome 19 makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. Chromosome 19 is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families, and Fc $\alpha$  receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19. Translocations with chromosome 19 and chromosome 14 can be seen in some lymphoproliferative disorders and typically involve the proto-oncogene BcI-3.

## **REFERENCES**

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# **CHROMOSOMAL LOCATION**

Genetic locus: ZFR2 (human) mapping to 19p13.3.

## **RESEARCH USE**

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

#### **PRODUCT**

ZFR2 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 ZFR2 shRNA Plasmid (h): sc-97930-SH and ZFR2 shRNA (h) Lentiviral Particles: sc-97930-V as alternate gene silencing products.

For independent verification of ZFR2 (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-97930A, sc-97930B and sc-97930C.

#### 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**

ZFR2 siRNA (h) is recommended for the inhibition of ZFR2 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 ZFR2 gene expression knockdown using RT-PCR Primer: ZFR2 (h)-PR: sc-97930-PR (20  $\mu$ I). 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.