



# resistin-like $\beta$ siRNA (h): sc-39725

## BACKGROUND

The cysteine-rich, adipose tissue-specific, secretory factor resistin (resistance to Insulin, also known as ADSF) is a secreted hormone that potentially links obesity to diabetes. Resistin is rich in serine and cysteine residues and contains a unique cysteine repeat motif. Resistin and the resistin-like molecules share the characteristic cysteine composition and other signature features. Resistin-like  $\alpha$  is a secreted protein that has restricted tissue distribution and is most highly expressed in adipose tissue. Another family member, resistin-like  $\beta$ , is a secreted protein expressed only in the gastrointestinal tract, particularly in the colon, in both mouse and human. Resistin-like  $\beta$  expression is highest in proliferative epithelial cells and is markedly increased in tumors, suggesting a role in intestinal proliferation.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RETNLB (human) mapping to 3q13.13.

## PRODUCT

resistin-like  $\beta$  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 resistin-like  $\beta$  shRNA Plasmid (h): sc-39725-SH and resistin-like  $\beta$  shRNA (h) Lentiviral Particles: sc-39725-V as alternate gene silencing products.

For independent verification of resistin-like  $\beta$  (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-39725A, sc-39725B and sc-39725C.

## 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

resistin-like  $\beta$  siRNA (h) is recommended for the inhibition of resistin-like  $\beta$  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 resistin-like  $\beta$  gene expression knockdown using RT-PCR Primer: resistin-like  $\beta$  (h)-PR: sc-39725-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.