



# Reg III $\delta$ siRNA (m): sc-106497

## BACKGROUND

The regeneration (Reg) family consists of secretory proteins involved in liver, pancreatic, gastric and intestinal cell proliferation or differentiation. Members of the REG family are divided into four subclasses, designated types I, II, III and IV. They have been implicated in the regulation of cell growth, tumorigenesis and the progression of cancer. While there are only two human Reg proteins, namely Reg III $\alpha$  and Reg III $\gamma$ , four members of the Reg family exist in mice and are known as Reg III $\alpha$ , Reg III $\beta$ , Reg III $\gamma$  and Reg III $\delta$ . Reg III $\delta$  (regenerating islet-derived 3  $\delta$ ), also known as Ingaprp, is a 98 amino acid mouse protein that belongs to the Reg family and, as such, may be involved in the regulation of cell growth and differentiation.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Reg3d (mouse) mapping to 6 C3.

## PRODUCT

Reg III $\delta$  siRNA (m) is a target-specific 19-25 nt siRNA 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 Reg III $\delta$  shRNA Plasmid (m): sc-106497-SH and Reg III $\delta$  shRNA (m) Lentiviral Particles: sc-106497-V as alternate gene silencing products.

## 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

Reg III $\delta$  siRNA (m) is recommended for the inhibition of Reg III $\delta$  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 Reg III $\delta$  gene expression knockdown using RT-PCR Primer: Reg III $\delta$  (m)-PR: sc-106497-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.