

# 9130404H23Rik siRNA (m): sc-140529

## BACKGROUND

9130404H23Rik, also known as Themis3 (thymocyte selection associated family member 3), is a 569 murine protein that is specifically expressed in intestine. 9130404H23Rik and human related protein, Themis (thymocyte-expressed molecule involved in selection), both belong to the themis family. Themis interacts with PLC  $\gamma$ 1, Emt and GRB2. Acting through T-cell antigen receptor (TCR) signaling and through the regulation of calcium influx and phosphorylation of ERK 1, Themis plays a central role in late thymocyte development by controlling both positive and negative T-cell selection. Themis is phosphorylated on Tyr residues quickly after TCR stimulation. The gene encoding 9130404H23Rik is located on mouse chromosome 17 E1.1.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Themis3 (mouse) mapping to 17 E1.1.

## PROTOCOLS

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

## PRODUCT

9130404H23Rik 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 9130404H23Rik shRNA Plasmid (m): sc-140529-SH and 9130404H23Rik shRNA (m) Lentiviral Particles: sc-140529-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

9130404H23Rik siRNA (m) is recommended for the inhibition of 9130404H23Rik 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 9130404H23Rik gene expression knockdown using RT-PCR Primer: 9130404H23Rik (m)-PR: sc-140529-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.