

# TRIM49 siRNA (h): sc-96532

## BACKGROUND

TRIM49 (Tripartite motif-containing protein 49), also known as RNF18 (RING finger protein 18), is a 452 amino acid protein that belongs to the TRIM/RBCC family (C3HC4 subfamily) and is preferentially expressed in testis. TRIM49 contains one B box-type zinc finger, one SPRY domain and one RING-type zinc finger, a motif that has zinc-chelating activity and is involved in mediating protein-protein and protein-DNA interactions. As a member of the TRIM/RBCC family, TRIM49 may function in transcriptional regulation, cell transformation and carcinogenesis.

## REFERENCES

1. Yoshikawa, T., Seki, N., Azuma, T., Masuho, Y., Muramatsu, M., Miyajima, N. and Saito, T. 2000. Isolation of a cDNA for a novel human RING finger protein gene, RNF18, by the virtual transcribed sequence (VTS) approach. *Biochim. Biophys. Acta* 1493: 349-355.
2. Bates, B., Xie, Y., Taylor, N., Johnson, J., Wu, L., Kwak, S., Blatcher, M., Gulukota, K. and Paulsen, J.E. 2002. Characterization of mGluR5R, a novel, metabotropic glutamate receptor 5-related gene. *Brain Res. Mol. Brain Res.* 109: 18-33.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606124. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Thelie, A., Papillier, P., Penner, S., Perreau, C., Traverso, J.M., Uzbekova, S., Mermillod, P., Joly, C., Humblot, P. and Dalbiès-Tran, R. 2007. Differential regulation of abundance and deadenylation of maternal transcripts during bovine oocyte maturation *in vitro* and *in vivo*. *BMC Dev. Biol.* 7: 125.

## CHROMOSOMAL LOCATION

Genetic locus: TRIM49 (human) mapping to 11q14.3.

## PRODUCT

TRIM49 siRNA (h) 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 TRIM49 shRNA Plasmid (h): sc-96532-SH and TRIM49 shRNA (h) Lentiviral Particles: sc-96532-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.

## PROTOCOLS

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

## APPLICATIONS

TRIM49 siRNA (h) is recommended for the inhibition of TRIM49 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.

## GENE EXPRESSION MONITORING

TRIM49 (3-H): sc-100884 is recommended as a control antibody for monitoring of TRIM49 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor TRIM49 gene expression knockdown using RT-PCR Primer: TRIM49 (h)-PR: sc-96532-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.