

# TRIM8 siRNA (h): sc-90801

## BACKGROUND

The tripartite motif (TRIM) family of proteins are characterized by a conserved TRIM domain that includes a coiled-coil region, a B-box type zinc finger, one RING finger and three zinc-binding domains. TRIM8 (tripartite motif containing 8), also known as GERP (glioblastoma-expressed RING finger protein) or RNF27 (RING finger protein 27), is a 551 amino acid protein that is thought to function as an E3 ubiquitin-protein ligase that promotes SOCS-1 proteasomal degradation. As a widely expressed homodimer, TRIM8 localizes to nuclear bodies and contains two B box-type zinc fingers and one RING-type zinc finger. TRIM8 is expressed in lung, heart, brain and skeletal muscle, with low levels detected in intestine, placenta, leukocytes and liver. The gene encoding TRIM8 maps to human chromosome 10q24.32.

## REFERENCES

1. Vincent, S.R., et al. 2000. A novel RING finger-B box-coiled-coil protein, GERP. *Biochem. Biophys. Res. Commun.* 279: 482-486.
2. Raymond, A., et al. 2001. The tripartite motif family identifies cell compartments. *EMBO J.* 20: 2140-2151.
3. Toniato, E., et al. 2002. TRIM8/GERP RING finger protein interacts with SOCS-1. *J. Biol. Chem.* 277: 37315-37322.
4. Toniato, E., et al. 2004. Genomic organization and cytokine-mediated inducibility of the human TRIM-8/Gerp gene. *Int. J. Immunopathol. Pharmacol.* 17: 71-76.
5. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 606125. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: TRIM8 (human) mapping to 10q24.32.

## PRODUCT

TRIM8 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 TRIM8 shRNA Plasmid (h): sc-90801-SH and TRIM8 shRNA (h) Lentiviral Particles: sc-90801-V as alternate gene silencing products.

For independent verification of TRIM8 (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-90801A, sc-90801B and sc-90801C.

## 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

TRIM8 siRNA (h) is recommended for the inhibition of TRIM8 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

TRIM8 (B-3): sc-398878 is recommended as a control antibody for monitoring of TRIM8 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 TRIM8 gene expression knockdown using RT-PCR Primer: TRIM8 (h)-PR: sc-90801-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.