



▶ TRIM69 siRNA (m): sc-76753

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. TRIM69 (tripartite motif-containing 69), also known as Trif, HSD34 or RNF36 (RING finger protein 36), is a 500 amino acid protein that belongs to the TRIM family and contains one RING-type zinc finger and one B30.2/SPRY domain. Localizing to nuclear speckles, TRIM69 interacts with PML (promyelocytic leukemia) and is thought to play a role in spermatogenesis and, when overexpressed, may be involved in apoptosis. TRIM69 is subject to posttranslational phosphorylation, an event which is necessary for TRIM69 nuclear localization. Multiple isoforms of TRIM69 exist due to alternative splicing events.

REFERENCES

1. Borden, K.L. and Freemont, P.S. 1996. The RING finger domain: a recent example of a sequence-structure family. *Curr. Opin. Struct. Biol.* 6: 395-401.
2. Reymond, A., Meroni, G., Fantozzi, A., Merla, G., Cairo, S., Luzi, L., Riganelli, D., Zanaria, E., Messali, S., Cainarca, S., Guffanti, A., Minucci, S., Pelicci, P.G. and Ballabio, A. 2001. The tripartite motif family identifies cell compartments. *EMBO J.* 20: 2140-2151.
3. Shyu, H.W., Hsu, S.H., Hsieh-Li, H.M. and Li, H. 2001. A novel member of the RBCC family, Trif, expressed specifically in the spermatids of mouse testis. *Mech. Dev.* 108: 213-216.
4. Shyu, H.W., Hsu, S.H., Hsieh-Li, H.M. and Li, H. 2003. Forced expression of RNF36 induces cell apoptosis. *Exp. Cell Res.* 287: 301-313.
5. Meroni, G. and Diez-Roux, G. 2005. TRIM/RBCC, a novel class of "single protein RING finger" E3 ubiquitin ligases. *Bioessays* 27: 1147-1157.
6. Sardiello, M., Cairo, S., Fontanella, B., Ballabio, A. and Meroni, G. 2008. Genomic analysis of the TRIM family reveals two groups of genes with distinct evolutionary properties. *BMC Evol. Biol.* 8: 225.
7. Ozato, K., Shin, D.M., Chang, T.H. and Morse, H.C. 2008. TRIM family proteins and their emerging roles in innate immunity. *Nat. Rev. Immunol.* 8: 849-860.

CHROMOSOMAL LOCATION

Genetic locus: Trim69 (mouse) mapping to 2 E5.

PRODUCT

TRIM69 siRNA (m) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TRIM69 shRNA Plasmid (m): sc-76753-SH and TRIM69 shRNA (m) Lentiviral Particles: sc-76753-V as alternate gene silencing products.

For independent verification of TRIM69 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-76753A, sc-76753B and sc-76753C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

TRIM69 siRNA (m) is recommended for the inhibition of TRIM69 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 μ M in 66 μ 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 TRIM69 gene expression knockdown using RT-PCR Primer: TRIM69 (m)-PR: sc-76753-PR (20 μ 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 for detailed protocols and support products.