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# TRIM50 siRNA (m): sc-154656

## 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. TRIM50 (tripartite motif containing 50), also known as TRIM50A or E3 ubiquitin-protein ligase TRIM50, is a 487 amino acid cytoplasmic protein that functions as an E3 ubiquitin-protein ligase. Containing one RING-type zinc finger, a B30.2/SPRY domain and a single B box-type zinc finger, TRIM50 belongs to the TRIM/RBCC family and undergoes post-translational auto-ubiquitination. TRIM50 exists as two alternatively spliced isoforms, designated TRIM50  $\alpha$  and TRIM50  $\beta$ , and has the ability to form dimers and trimers. The gene encoding TRIM50 maps to human chromosome 7, which houses over 1,000 genes, comprises nearly 5% of the human genome and has been linked to Osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

## REFERENCES

1. Tspouras, P., Myers, J.C., Ramirez, F. and Prockop, D.J. 1983. Restriction fragment length polymorphism associated with the pro  $\alpha$  2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. *J. Clin. Invest.* 72: 1262-1267.
2. Liang, H., Fairman, J., Claxton, D.F., Nowell, P.C., Green, E.D. and Nagarajan, L. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. *Proc. Natl. Acad. Sci. USA* 95: 3781-3785.
3. Osborne, L.R., Joseph-George, A.M. and Scherer, S.W. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. *Methods Mol. Med.* 126: 113-128.
4. Reiner, O., Sapoznik, S. and Sapir, T. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. *Neuromolecular Med.* 8: 547-565.
5. Gilbert-Dussardier, B. 2006. Williams-Beuren syndrome. *Rev. Prat.* 56: 2102-2106.
6. Leone, G., Pagano, L., Ben-Yehuda, D. and Voso, M.T. 2007. Therapy-related leukemia and myelodysplasia: susceptibility and incidence. *Haematologica* 92: 1389-1398.
7. Micale, L., Fusco, C., Augello, B., Napolitano, L.M., Dermitzakis, E.T., Meroni, G., Merla, G. and Reymond, A. 2008. Williams-Beuren syndrome TRIM50 encodes an E3 ubiquitin ligase. *Eur. J. Hum. Genet.* 16: 1038-1049.
8. Kawai, T. and Akira, S. 2011. Regulation of innate immune signalling pathways by the tripartite motif (TRIM) family proteins. *EMBO Mol. Med.* 3: 513-527.
9. Boudinot, P., van der Aa, L.M., Jouneau, L., Du Pasquier, L., Pontarotti, P., Briolat, V., Benmansour, A. and Levraud, J.P. 2011. Origin and evolution of TRIM proteins: new insights from the complete TRIM repertoire of zebrafish and pufferfish. *PLoS ONE* 6: e22022.

## CHROMOSOMAL LOCATION

Genetic locus: Trim50 (mouse) mapping to 5 G2.

## PRODUCT

TRIM50 siRNA (m) is a pool of 2 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 TRIM50 shRNA Plasmid (m): sc-154656-SH and TRIM50 shRNA (m) Lentiviral Particles: sc-154656-V as alternate gene silencing products.

For independent verification of TRIM50 (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-154656A and sc-154656B.

## 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

TRIM50 siRNA (m) is recommended for the inhibition of TRIM50 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 TRIM50 gene expression knockdown using RT-PCR Primer: TRIM50 (m)-PR: sc-154656-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.