

TRIM15 siRNA (m): sc-76739

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. TRIM15 (tripartite motif-containing 15), also known as RNF93, ZNFB7 or ZNF178, is a 465 amino acid cytoplasmic protein that contains one RING-type zinc finger, one B box-type zinc finger and one SPRY domain. One of several members of the TRIM family, TRIM15 exists as two alternatively spliced isoforms, known as α and β , which may play a role in transcriptional regulation events. The gene encoding TRIM15 maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome.

REFERENCES

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2. Reymond, A., et al. 2001. The tripartite motif family identifies cell compartments. *EMBO J.* 20: 2140-2151.
3. Meroni, G. and Diez-Roux, G. 2005. TRIM/RBCC, a novel class of "single protein RING finger" E3 ubiquitin ligases. *Bioessays* 27: 1147-1157.
4. Ando, A., et al. 2005. Genomic sequence analysis of the 238-kb swine segment with a cluster of TRIM and olfactory receptor genes located, but with no class I genes, at the distal end of the SLA class I region. *Immunogenetics* 57: 864-873.
5. Ozato, K., et al. 2008. TRIM family proteins and their emerging roles in innate immunity. *Nat. Rev. Immunol.* 8: 849-860.
6. Uchil, P.D., et al. 2008. TRIM E3 ligases interfere with early and late stages of the retroviral life cycle. *PLoS Pathog.* 4: e16.

CHROMOSOMAL LOCATION

Genetic locus: Trim15 (mouse) mapping to 17 B1.

PRODUCT

TRIM15 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 TRIM15 shRNA Plasmid (m): sc-76739-SH and TRIM15 shRNA (m) Lentiviral Particles: sc-76739-V as alternate gene silencing products.

For independent verification of TRIM15 (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-76739A, sc-76739B and sc-76739C.

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.

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

TRIM15 siRNA (m) is recommended for the inhibition of TRIM15 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 TRIM15 gene expression knockdown using RT-PCR Primer: TRIM15 (m)-PR: sc-76739-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.