SANTA CRUZ BIOTECHNOLOGY, INC.

# TRIM38 siRNA (h): sc-95352

## BACKGROUND

Tripartite motif-containing protein 38 (TRIM38), also known as RING finger protein 15 (RNF15) or zinc finger protein RoRet, is a 465 amino acid member of the TRIM family, also known as the RING-B-box coiled-coil (RBCC) family. Members of the RBCC family have an N-terminal RING finger, followed by one or two zinc-binding domains (B-box domains), a leucine coiled-coil region and a variable C-terminal domain. Found in all eukaryotes, members of the RBCC family typically function within a larger protein complex and possess ubiquitin-protein isopeptide ligase activity.

## REFERENCES


1. 1997. Ancient missense mutations in a new member of the RoRet gene family are likely to cause familial Mediterranean fever. The International FMF Consortium. Cell 90: 797-807.
2. Rhodes, D.A., Ihrke, G., Reinicke, A.T., Malcherek, G., Towey, M., Isenberg, D.A. and Trowsdale, J. 2002. The 52 000 MW Ro/SS-A autoantigen in Sjögren's syndrome/systemic lupus erythematosus (Ro52) is an interferon-γ inducible tripartite motif protein associated with membrane proximal structures. Immunology 106: 246-256.
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. Hennig, J., Ottosson, L., Andresen, C., Horvath, L., Kuchroo, V.K., Broo, K., Wahren-Herlenius, M. and Sunnerhagen, M. 2005. Structural organization and $Zn^{2+}$-dependent subdomain interactions involving autoantigenic epitopes in the Ring-B-box-coiled-coil (RBCC) region of Ro52. J. Biol. Chem. 280: 33250-33261.
5. Short, K.M. and Cox, T.C. 2006. Subclassification of the RBCC/TRIM superfamily reveals a novel motif necessary for microtubule binding. J. Biol. Chem. 281: 8970-8980.
6. Massiah, M.A., Simmons, B.N., Short, K.M. and Cox, T.C. 2006. Solution structure of the RBCC/TRIM B-box1 domain of human MID1: B-box with a RING. J. Mol. Biol. 358: 532-545.


## CHROMOSOMAL LOCATION

Genetic locus: TRIM38 (human) mapping to 6p22.2.

## PRODUCT

TRIM38 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TRIM38 shRNA Plasmid (h): sc-95352-SH and TRIM38 shRNA (h) Lentiviral Particles: sc-95352-V as alternate gene silencing products.

For independent verification of TRIM38 (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-95352A, sc-95352B and sc-95352C.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## 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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

TRIM38 siRNA (h) is recommended for the inhibition of TRIM38 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 µM in 66 µl. 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 TRIM38 gene expression knockdown using RT-PCR Primer: TRIM38 (h)-PR: sc-95352-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

## SELECT PRODUCT CITATIONS


1. Jun, L., Yan, D., An, W., Bowen, L., Zhou, X., Tailang, Y., Yan, W., Tao, T., Yang, Q., Chen, J., Jing, Y. 2023. Investigation into the role of the MITA-TRIM38 interaction in regulating pyroptosis and maintaining immune tolerance at the maternal-fetal interface. Cell Death Dis. 14: 780.


## PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.