

REL^T siRNA (m): sc-152798

BACKGROUND

REL^T (receptor expressed in lymphoid tissues), also known as tumor necrosis factor receptor superfamily member 19L (TNFRSF19L), is a transmembrane glycoprotein. It is expressed in thymus, spleen, testis, colon, skeletal muscle and peripheral blood lymphocytes. REL^T contains two cysteine rich domains (although one is incomplete) and does not contain the death domain that is present in some of the TNFR family members. Unlike the other family members that also lack the death domain, REL^T does not bind the TRAF adaptor proteins. REL^T binds and is phosphorylated by SPAK. This interaction is required for the activation of p38 and JNK signaling. REL^T also interacts with, and is phosphorylated by, OSR1 kinase. In addition, REL^T may be involved in T cell activation. The overexpression of REL^T induces phosphorylation of c-Jun and ATF-2. This implies the activation of the JNK and p38 signaling cascades.

REFERENCES

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4. Cusick, J.K., Xu, L.G., Bin, L.H., Han, K.J. and Shu, H.B. 2006. Identification of REL^T homologues that associate with REL^T and are phosphorylated by OSR1. *Biochem. Biophys. Res. Commun.* 340: 535-543.
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6. Polek, T.C., Talpaz, M. and Spivak-Kroizman, T.R. 2006. TRAIL-induced cleavage and inactivation of SPAK sensitizes cells to apoptosis. *Biochem. Biophys. Res. Commun.* 349: 1016-1024.
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CHROMOSOMAL LOCATION

Genetic locus: Relt (mouse) mapping to 7 E3.

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.

PRODUCT

REL^T 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 μM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see REL^T shRNA Plasmid (m): sc-152798-SH and REL^T shRNA (m) Lentiviral Particles: sc-152798-V as alternate gene silencing products.

For independent verification of REL^T (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-152798A, sc-152798B and sc-152798C.

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

REL^T siRNA (m) is recommended for the inhibition of REL^T 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 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 REL^T gene expression knockdown using RT-PCR Primer: REL^T (m)-PR: sc-152798-PR (20 μl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.