

RLIM siRNA (m): sc-62953

BACKGROUND

RLIM (RING finger LIM domain-binding protein), also known as RNF12 (RING finger protein 12) or NY-REN-43, is a 624 amino acid RING-H2 zinc finger protein that is involved in protein ubiquitinylation and subsequent degradation. Expressed in a variety of tissues, RLIM binds to the LIM domain of various proteins and functions as a protein ligase that negatively co-regulates LIM homeodomain (LIM-HD) transcription factors. Through its interaction with Sin3A, a component of the histone deacetylase corepressor complex, RLIM is able to recruit the corepressor complex to LIM-HD proteins, thereby inhibiting LIM-HD transcription. In addition to recruiting the deacetylase complex to LIM-HD proteins, RLIM is able to bind to, ubiquitinate and subsequently degrade CLIM proteins, which function as positive co-regulators of LIM-HD transcription factors. RLIM contains one RING-type zinc finger and is implicated in renal cell carcinoma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Rlim (mouse) mapping to X D.

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

RLIM 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 RLIM shRNA Plasmid (m): sc-62953-SH and RLIM shRNA (m) Lentiviral Particles: sc-62953-V as alternate gene silencing products.

For independent verification of RLIM (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-62953A, sc-62953B and sc-62953C.

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

RLIM siRNA (m) is recommended for the inhibition of RLIM 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 RLIM gene expression knockdown using RT-PCR Primer: RLIM (m)-PR: sc-62953-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.