

RRBP1 siRNA (m): sc-153126

BACKGROUND

RRBP1 (ribosome binding protein 1 homolog (canine)), also known as ribosome-binding protein 1, ribosome receptor protein, ES/130-related protein, hES, DKFZp586A1420, FLJ36146, ES130, ES/130, MGC157720 or MGC157721, is a 1,410 amino acid single-pass type III membrane protein localizing in endoplasmic reticulum membrane. RRBP1 acts as a ribosome receptor by regulating interactions between the endoplasmic reticulum membrane and ribosomes, while enhancing secretory activity and playing a role in membrane biogenesis. RRBP1 has been found at high levels in placenta, pancreas and liver, and contains a novel microtubule-binding domain (MTB-1) for binding and modulating microtubules via associations with the endoplasmic reticulum. Multiple forms of RRBP1 exist; three of which can be attributed to alternative splicing events, while others are produced by removal of tandem repeats or partial intraexonic splicing. The gene encoding RRBP1 maps to human chromosome 20p12.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Rrbp1 (mouse) mapping to 2 G1.

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

RRBP1 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 RRBP1 shRNA Plasmid (m): sc-153126-SH and RRBP1 shRNA (m) Lentiviral Particles: sc-153126-V as alternate gene silencing products.

For independent verification of RRBP1 (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-153126A, sc-153126B and sc-153126C.

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

RRBP1 siRNA (m) is recommended for the inhibition of RRBP1 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 RRBP1 gene expression knockdown using RT-PCR Primer: RRBP1 (m)-PR: sc-153126-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.