SANTA CRUZ BIOTECHNOLOGY, INC.

LRP2BP siRNA (h): sc-89287

BACKGROUND

LRP2BP (LRP2-binding protein), also known as MegBP (megalin-binding protein), is a 347 amino acid protein that contains one TPR repeat and six Sel1-like repeats. Localized to the plasma membrane and throughout the cytoplasm, LRP2BP interacts with megalin (also known as LRP2) and, via this interaction, is thought to regulate megalin function. Specifically, LRP2BP acts as a scaffold protein that, through its TPR motifs, assists in the sequestration and/or the release of transcription factors that influence megalin's affects on endocytosis and hormone release. LRP2BP is expressed in colon, testis, small intestine and blood leukocytes, as well as in pancreatic adenocarcinoma cells, suggesting a possible role for LRP2BP in carcinogenesis. Two isoforms of LRP2BP exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LRP2BP (human) mapping to 4q35.1.

RESEARCH USE

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

PRODUCT

LRP2BP 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 LRP2BP shRNA Plasmid (h): sc-89287-SH and LRP2BP shRNA (h) Lentiviral Particles: sc-89287-V as alternate gene silencing products.

For independent verification of LRP2BP (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-89287A, sc-89287B and sc-89287C.

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

LRP2BP siRNA (h) is recommended for the inhibition of LRP2BP 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 LRP2BP gene expression knockdown using RT-PCR Primer: LRP2BP (h)-PR: sc-89287-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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